

STATE OF VERMONT  
PUBLIC SERVICE BOARD

Docket No. 7670

Petition of twenty Vermont utilities and Vermont Public )  
Power Supply Authority requesting authorization, )  
pursuant to 30 V.S.A. Section 248, for the purchase of )  
shares of 218 MW to 225 MW of electricity of H.Q. )  
Energy Services (U.S.) Inc., commencing November 1, )  
2012, and continuing through 2038, issuance of findings )  
that such purchases are entitled to rate recovery )  
assurance, and requesting certain approvals under )  
30 V.S.A. Section 108 – )

Hearings at  
Montpelier, Vermont  
January 19-20, 2011

Order entered: 4/15/2011

PRESENT: James Volz, Chairman  
David C. Coen, Board Member  
John D. Burke, Board Member

APPEARANCES: *(See Appendix A)*

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## **I. INTRODUCTION**

Over the next several years, Vermont's retail electric utilities are faced with the expiration of two significant contracts that supply in aggregate 590 MW of power, which represents roughly two-thirds of their customers' energy needs. One of the expiring contracts is a power purchase agreement between the Vermont Joint Owners and Hydro-Québec (the "HQ-VJO Contract") for 310 MW of power, which phases out in stages between 2012 and 2020 (with a majority of the power deliveries ending by 2015).<sup>1</sup> The expiration of these existing contracts will result in a significant need for replacement power. The utilities propose to meet a substantial part of this need through a new Purchased Power Agreement (the "HQ PPA") with H.Q. Energy Services (U.S.) Inc. ("HQUS"). Under the HQ PPA and associated transactions, twenty Vermont electric utilities would collectively purchase between 218 MW and 225 MW of energy from HQUS starting in 2012 and continuing through 2038. In this proceeding, the Petitioners have requested

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1. The other major expiring contract is for approximately 280 MW of power from the Vermont Yankee Nuclear Power Station. This contract expires in 2012 regardless of whether the Vermont Yankee station continues to operate thereafter.

that the Public Service Board ("Board") issue a Certificate of Public Good ("CPG") pursuant to 30 V.S.A. § 248 approving the HQ PPA.

The proposed HQ PPA would provide a number of benefits to the Vermont utilities and their ratepayers. First, over the term of the contract the price of power is expected to be competitive with or favorable to market prices, and is less expensive than currently available sources of power with similar characteristics. Second, the price for this power is expected to be more stable than purely market-based purchases due to the formula for determining its future price. This formula is based not only on market prices for power but also on inflation, and includes a buffering feature that limits year-to-year price fluctuations. Third, the Vermont utilities will receive environmental attributes associated with the energy delivered by HQUS into the New England market in an amount matching the Vermont utilities' purchases under the HQ PPA and reflecting at least 90 percent hydroelectricity, which Vermont law recognizes as renewable.

Given these benefits and the utilities' clear need to replace the power from expiring contracts, the Board has concluded that the HQ PPA will promote the general good of the State, and therefore is issuing a CPG approving the HQ PPA. In today's Order, the Board also: (1) approves related transactions by which HQ PPA power is further allocated among certain of the Petitioners; (2) consents to the provision of collateral by certain of the Petitioners; (3) determines that the HQ PPA does not require HQUS to obtain a CPG under 30 V.S.A. § 231; and (4) denies the Petitioners' request for guaranteed rate recovery for the costs associated with the HQ PPA.

## **II. PROCEDURAL HISTORY**

On August 17, 2010, the Petitioners<sup>2</sup> filed their request for authorization, pursuant to 30 V.S.A. § 248, for the purchase of shares of 218 MW to 225 MW of electricity from HQUS, commencing November 1, 2012, and continuing through 2038.

On September 10, 2010, the Board held a prehearing conference in this proceeding.

On September 15, 2010, the Board issued a Protective Order approving a protective agreement and governing the protection of documents and information provided in discovery that a party alleges is of a confidential and proprietary nature.

On September 23, 2010, the Board issued an Order granting International Business Machines Corporation ("IBM") and the Conservation Law Foundation ("CLF") permissive intervention pursuant to Board Rule 2.209(B). In that same Order, the Board granted IBM's motion for admission of counsel *pro hac vice*.

On October 20, 2010, the Board conducted a public hearing via Vermont Interactive Television sites in Bennington, Brattleboro, Castleton, Johnson, Lyndonville, Middlebury, Montpelier, Newport, Randolph Center, Rutland, Springfield, St. Albans, Waterbury, White River Junction and Williston. No members of the public spoke at the public hearing. The Board received two written public comments in this proceeding. One comment expressed concern that the HQ PPA provides that its pricing terms should be kept confidential. The other comment requested that Vermont support and encourage an open, competitive procurement process for all power purchase agreements.

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2. The Petitioners include: Barton Village, Inc. Electric Department ("Barton"); City of Burlington Electric Department ("BED"); Central Vermont Public Service Corporation ("CVPS"); Village of Enosburg Falls Water & Light Department, Inc. ("Enosburg"); Green Mountain Power Corporation ("GMP"); Town of Hardwick Electric Department ("Hardwick"); Village of Hyde Park Electric Department ("Hyde Park"); Village of Jacksonville Electric Company ("Jacksonville"); Village of Johnson Water & Light Department ("Johnson"); Village of Ludlow Electric Light Department ("Ludlow"); Village of Lyndonville Electric Department ("Lyndonville"); Village of Morrisville Water & Light Department ("Morrisville"); Village of Northfield Electric Department ("Northfield"); Village of Orleans Electric Department ("Orleans"); Town of Readsboro Electric Light Department ("Readsboro"); Town of Stowe Electric Department ("Stowe"); Swanton Village, Inc. Electric Department ("Swanton"); Vermont Electric Cooperative, Inc. ("VEC"); Vermont Public Power Supply Authority ("VPPSA"); Vermont Marble Power Division of OMYA, Inc. ("Vermont Marble"); and Washington Electric Cooperative, Inc. ("WEC").

On November 19, 2010, the Board issued an Order denying a motion by CLF to join HQUS as a party to this proceeding.

On December 14, 2010, the Board issued an Order granting in part, and denying in part, a motion filed by CVPS, GMP, VEC, WEC, and Stowe ("Movants") for confidential treatment of portions of their prefiled testimony and exhibits. In that Order, the Board also required the Movants to file supplemental support for certain of the allegedly confidential information for which they sought protection.

On December 22, 2010, the Movants filed a motion for reconsideration of the December 14 Order. In their motion, the Movants agreed to unredact most of the information that the Board indicated should be either unredacted or supported by supplemental averments. The Movants provided explanations for those portions which they continued to maintain should be granted confidential treatment. On January 3, 2011, the Movants filed a letter correcting a reference, and scaling back their request for protection of a portion of an exhibit.

On January 14, 2011, the Board issued an Order granting the Movants' request for protection for those items identified in their December 22 motion for reconsideration as modified by their January 3, 2011, filing.

On January 19-20, 2011, the Board held technical hearings.

On January 25, 2011, GMP filed a motion to amend the Board's December 14, 2010, Protective Order regarding prefiled evidence to include two pieces of evidence entered into the record in this proceeding during the technical hearings. No party objected to GMP's motion. The Board's ruling on this motion is contained in Section III, below.

On January 28, 2011, in response to a request from the Board during the technical hearings, VPPSA filed a document with hydrologic data from Swanton's Highgate Falls generation station. We hereby admit this document into the record as Exh. VPPSA-8. Any party wishing to object to the admission of this document into the record should do so in a motion for reconsideration of this Order.

On February 18, 2011, the Petitioners jointly filed a proposed decision. On that same date, the Vermont Department of Public Service ("Department" or "DPS") filed a brief, and CLF filed a proposed decision.

On March 4, 2011, the Petitioners jointly filed a reply brief. On that same date, VEC, WEC, the Department and CLF separately filed reply briefs. On March 8, 2011, Swanton filed a reply brief.

On March 29, 2011, the Department filed its determination of compliance with the electric energy plan under 30 V.S.A. § 202(f). We hereby admit this document into the record as Exh. DPS-5. Any party wishing to object to the admission of this document into the record should do so in a motion for reconsideration of this Order.

### **III. REQUEST TO AMEND PROTECTIVE ORDER**

On January 25, 2011, GMP filed a motion to amend the Board's December 14, 2010, Protective Order regarding prefiled evidence to include two pieces of evidence entered into the record in this proceeding during the technical hearings. Specifically, GMP requested that the Board grant confidential treatment to:

- (1) the unredacted version of page 13 of Department witness Lamont's prefiled testimony which includes information related to the formula for adjusting the HQ PPA price; and
- (2) Exh. DPS-2 (Conf.), which constitutes the unredacted version of Petitioners' Responses to Interrogatories 25 through 35 of the Department's first set of discovery requests, and which includes information related to the credit provisions of the HQ PPA.<sup>3</sup>

No party objected to GMP's motion.

In the December 14, 2010, Protective Order, the Board set forth the factors it considers when determining whether to protect confidential information.<sup>4</sup> As stated in that Order, the Board has actively taken steps to limit the amount of information subject to protective orders and appropriately places a heavy burden on the party seeking confidentiality to justify that decision. In this Docket, the Board has denied some requests for confidentiality even though none of the parties to this proceeding objected to these requests. Nevertheless, as stated in the January 14, 2011, Order in this proceeding:

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3. Only Responses 26, 30, and 33 include the allegedly confidential information.

4. Order of 12/14/10 at 2-3.

In some cases, however, the Board must balance the objective of allowing Vermont ratepayers access to information about the specific terms of a power purchase agreement against the negative effect such public disclosure in a Board proceeding may have on Vermonters' rates for electricity. Given the trend at both the federal and state level toward keeping the specific terms of power purchase agreements confidential, public disclosure of certain of the specific terms of power purchase agreements in Board proceedings may place Vermont distribution utilities at a competitive disadvantage relative to out-of-state suppliers and buyers of wholesale power and could lead to higher electric rates for Vermont residents.<sup>5</sup>

In GMP's January 25 motion, GMP states that the Board granted the type of information identified in items (1) and (2), above, confidential treatment in its December 14, 2010, Protective Order. The Board concludes that GMP has made a sufficient showing for protection of those items; they are hereby added to the information that is subject to protection under the December 14, 2010, Order as confidential information.

#### **IV. POSITIONS OF THE PARTIES**

##### **Petitioners<sup>6</sup>**

The Petitioners assert that the Board should approve, pursuant to 30 V.S.A. § 248, the purchases by 20 Vermont utilities of 218 MW to 225 MW of energy and environmental attributes from HQUS beginning in 2012 and continuing through 2038, including purchases through the proposed transactions among VPPSA, the VPPSA Municipalities<sup>7</sup>, VEC and WEC under the VPPSA PSAs and the WEC-VEC Suballocation Agreement).<sup>8</sup> The Petitioners argue that the Board should find that each Petitioner's respective purchase obligations and associated costs are prudent and economically used-and-useful, and entitled to rate recovery assurance, subject to the obligation of each Petitioner to prudently manage such purchases. CVPS and Vermont Marble contend that the Board should also approve the CVPS-Vermont Marble Agreement. VPPSA,

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5. Order of 1/14/11 at 1-2 (footnote omitted).

6. Some of the Petitioners have filed individual positions on certain issues. These individual positions are consistent with those taken by the Petitioners as a whole, and therefore are included in the description of the Petitioners' positions.

7. The VPPSA Municipalities are listed in finding 4, below.

8. WEC asks that the Board authorize its participation as part of the VPPSA PSA only if the Board also approves the WEC-VEC Suballocation Agreement and VEC's membership subsequently provides approval, pursuant to 30 V.S.A. § 248(c).

Vermont Marble, Stowe and WEC claim that the Board should approve, pursuant to 30 V.S.A. § 108, the pledge of collateral under those entities' respective Collateral Agreements with HQUS or WEC's PSA with VPPSA. Finally, the Petitioners assert that the Board should find that performance by HQUS under the HQ PPA and related agreements does not require HQUS to obtain a CPG under 30 V.S.A. § 231(a).

#### Vermont Department of Public Service

The Department contends that the Board should approve the purchases of power and environmental attributes by the Petitioners, except the Board should not approve the requested allocation of power and environmental attributes to WEC and Swanton. The Department asserts that these two utilities do not have a present need for this power, and that the WEC-VEC Suballocation Agreement and the allocation of power to Swanton under the HQ PPA will not result in an economic benefit to the State. The Department argues that the Board should not grant the Petitioners' request for rate recovery assurance. The Department recommends that the Board grant the approvals requested pursuant to 30 V.S.A. § 108. Finally, the Department requests that the Board adopt a condition to protect consumers from misleading advertising and marketing claims regarding the environmental attributes to be obtained by the Petitioners through the HQ PPA.

#### Conservation Law Foundation

CLF asserts that the Board should find that the Petitioners have failed to demonstrate that the proposed transfer of environmental attributes provides any environmental benefits. CLF argues that the sale of the environmental attributes contemplated by the HQ PPA is not environmentally sound or consistent with Vermont's environmental and regulatory goals, even if allowed under the Sustainably Priced Energy Enterprise Development ("SPEED") program,<sup>9</sup> and the disposition of environmental attributes under the HQ PPA should be constrained. CLF

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9. The SPEED program was created by the Vermont Legislature in 2005 to promote the State's renewable energy goals. *See*, 30 V.S.A. § 8005; 2005, Act No. 61. Additional information about the SPEED program is available at the Vermont SPEED website (<http://vermontspeed.com>).

contends that the Board should conclude that the power supplied pursuant to the HQ PPA cannot be considered renewable or sustainable. CLF claims that the Petitioners have failed to address the impacts of the construction of new power generation plants in Québec, and that the recent Request for Proposals issued by CVPS, GMP and VEC for 100 MW of power<sup>10</sup> cannot be relied upon to show that the HQ PPA is a least-cost resource. To address its concerns, CLF recommends that the Board adopt three conditions related to verifying the environmental attributes and limiting the Petitioners' claims regarding the nature of the power provided under the HQ PPA. CLF has not taken a position on whether the Board should issue the approvals requested by the Petitioners.

#### International Business Machines Corporation

IBM has not taken a position in this proceeding.

### **V. FINDINGS AND DISCUSSION**

The findings that follow describe, first, the proposed transactions that are under review in this Docket. The findings then address the statutory standards by which the Board must judge those transactions.<sup>11</sup>

#### **A. Transaction Description**

##### Findings

##### **(1) The Parties to the HQ PPA**

1. Each Petitioner is a duly organized "company" as defined by 30 V.S.A. § 201, with a principal place of business in Vermont, and subject to the Board's jurisdiction pursuant to 30 V.S.A. § 203. Petition at 1.

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10. Responses to the joint Request for Proposals for new power supply options were received by CVPS, GMP and VEC on March 18, 2009. Cater/Watts/Deehan pf. at 23.

11. Four of the Section 248(b) criteria – (b)(1), (b)(5), (b)(8), and (b)(9) – are inapplicable to the HQ PPA, and therefore are not addressed in this Order. Section 248(b)(1) and (5) apply only to in-state facilities. Because the HQ PPA does not involve the construction of an in-state facility, these criteria do not apply. Because there is no in-state construction, the HQ PPA does not involve any facility located on or affecting any segment of State waters designated as outstanding resource waters. Therefore, Section 248(b)(8) does not apply. The HQ PPA does not involve a waste-to-energy facility, and therefore Section 248(b)(9) does not apply.

2. Petitioners CVPS, GMP, VPPSA, VEC, Vermont Marble, Stowe and BED are parties to the HQ PPA with HQUS, and each is a buyer ("Buyer," and collectively "Buyers") under the HQ PPA. Exh. Pet. Joint-3 at 1.

3. Petitioner VPPSA is a joint action agency and power supplier on behalf of municipal and cooperative electric utilities. As such, it is not a load-serving entity and does not have a corresponding load obligation. *See*, 30 V.S.A. § 5012(7), (8), and (11).

4. Petitioners Barton, Enosburg, Hardwick, Hyde Park, Jacksonville, Johnson, Ludlow, Lyndonville, Morrisville, Northfield, Orleans, Readsboro and Swanton are each members of VPPSA (collectively, the "VPPSA Municipalities"). Petition at 2; Callnan pf. at 2, 10–13.

5. Petitioners WEC and the VPPSA Municipalities have decided to purchase HQ PPA power through VPPSA, and as such VPPSA proposes to enter into Power Sales Agreements (the "VPPSA PSAs") for the sale of energy and transfer of environmental attributes from VPPSA to WEC and the VPPSA Municipalities (collectively, the "PSA Participants"). Exh. VPPSA-2; Callnan pf. at 2, 7–8.

6. Petitioner WEC proposes to convey its allotment of HQ PPA power to VEC until such time as WEC experiences a need for the power. Richards pf. at 13–14; *see also*, Findings 40 – 42, below.

7. HQUS is the U.S. power-marketing subsidiary of Hydro-Québec. HQUS's primary responsibility is to deliver Hydro-Québec Production's ("HQP") exported energy into neighboring U.S. markets. HQUS holds an authorization from the U.S. Federal Energy Regulatory Commission ("FERC") to sell at market-based rates and is a registered participant in all of the northeastern U.S. market regions. In New England, HQUS's activity includes reserving transmission and scheduling imports across the three primary interconnections between the region and Canada, one of which is the interconnection with Hydro-Québec at Highgate, Vermont. Deehan/Cole pf. at 9.

**(2) The HQ PPA****(a) The Contract Price**

8. The HQ PPA is a long-term, twenty-six-year power contract pursuant to which HQUS, as Seller, is obligated to transfer to the Vermont Buyers two distinct products: (i) up to 218 to 225 MW of energy, and (ii) an equivalent quantity of environmental attributes corresponding to energy from the HQP system mix, comprised of at least 90% hydroelectricity. Deehan/Cole pf. at 10; exh. Pet. Joint-3 at Article Three.

9. The HQ PPA's starting price will be \$58.07/MWh for the first year of the contract (November 1, 2012 - October 31, 2013). Deehan/Cole pf. at 20; tr. 1/19/11 at 12 (Deehan).

10. After the first year, the price of power under the HQ PPA is derived by a formula based on regional electricity prices and the movement in general of price levels observed across the U.S. economy, subject to a damping feature that limits the change from the prior year's price. The formula remains the same over the full term of the HQ PPA. Deehan/Cole pf. at 21; exh. Pet. Joint-3 at Section 3.2(e) and Appendix 3.2(e).

11. Under the HQ PPA, the contract price adjustments will be made annually. The parties have chosen an Operating Committee approach to handle administration of the HQ PPA, including implementation of the annual adjustments to the HQ PPA Price. Deehan/Cole pf. at 22; exh. Pet. Joint-3 at Appendix 3.2(e) and Section 10.2.

12. The annual adjustments to the contract price will be implemented as formulaic calculations prescribed by the specific formulas incorporated into the pricing provision of the HQ PPA. Deehan/Cole pf. at 22; exh. Pet. Joint-3 at Appendix 3.2(e).

**(b) The Energy Product and the Internal Bilateral Transaction Mechanism**

13. ISO-New England, Inc. ("ISO-NE"), established in 1997, plans for and operates the New England power grid and administers and oversees competitive wholesale markets for buying and selling electricity within ISO-NE's six-state New England region. Deehan/Cole pf. at 7.

14. The ISO-NE energy market consists of hourly "day-ahead" and "real-time" markets for electricity, each having its own hourly settlement to determine charges for energy demand and payments to supply. Deehan/Cole pf. at 8.

15. The day-ahead energy market occurs the day before the operating day and is defined by participants' estimated supply offers and demand bids for energy. From these offers and bids, ISO-NE identifies the lowest marginal market-clearing price required at each location, or node, for every hour to balance demand with supply. Deehan/Cole pf. at 8.

16. The quantities and prices that clear in the day-ahead market are financially, not physically, binding. During the operating day or real-time market, ISO-NE compares these predicted day-ahead volumes with actual supply and demand, and re-establishes a new hourly price depending on the need for more or less expensive supply to physically balance the market. If a participant does not match its commitments from the day-ahead market with actual supply or load during real-time, this difference is charged the real-time settlement price. Deehan/Cole pf. at 8.

17. Under the HQ PPA, the Vermont Buyers will be buying an energy product that will be transacted in the New England power markets via an Internal Bilateral Transaction ("IBT"). An IBT allows load-serving companies to offset the settlement of their day-ahead or real-time load obligations to the ISO-NE at market-clearing prices with supplies that settle in the same hours and in the same manner. After this offsetting occurs in the market system, a participant is effectively left with a price for the obligation that reflects the separate agreement between the parties. Thus, in effect, the IBT results in a portion of each Buyer's load obligations equal to its quantities of energy purchased under the HQ PPA to be hedged at the HQ PPA price. Deehan/Cole pf. at 9.

18. In accordance with the HQ PPA and applicable ISO-NE market rules and procedures, HQUS will schedule, and each of the Buyers will confirm, an IBT for the quantity of energy each hour called for under the HQ PPA. As a scheduled supplier, HQUS will then have an obligation to ISO-NE under Market Rule 1 to deliver the committed quantity into the New England markets during real-time, or pay for the energy not delivered into New England with a purchase of energy from the real-time energy market or another internal bilateral transaction. Deehan/Cole pf. at 17–18; exh. Pet. Joint-3 at Section 3.2.

19. With the IBT mechanism in the HQ PPA, the obligation for the scheduled energy resides solely with HQUS. Unavailability of the HQUS supply or transmission does not excuse its

performance under the HQ PPA. This aspect of the HQ PPA significantly reduces performance risk to the Vermont Buyers and their ratepayers compared to the HQ-VJO Contract or relative to sources of non-firm power. Deehan/Cole pf. at 18; tr. 1/19/11 at 51 (Deehan, Cole).

20. The HQ PPA provides the most firm type of energy supply available to the Buyers. Deehan/Cole pf. at 12.

21. The HQ PPA does not include capacity. Due to ISO-NE market rules relating to capacity and calculation of tie benefits, capacity over New England/Canadian interties is not available as a firm, long-term product at this time. Deehan/Cole pf. at 12; tr. 1/19/11 at 60-61 (Deehan).

### **(c) The Energy Schedule**

22. Generally, the Buyers' purchases under the HQ PPA commence in November 2012 and continue through 2038. Deehan/Cole pf. at 11; exh. Pet. Joint-3 at Section 3.1.

23. The HQ PPA includes six schedules of hourly volumes to be transacted ("Energy Quantity"), each with a set hourly volume and start and end dates, within two allocation tables, totaling in aggregate up to 218 to 225 MW per hour, sixteen hours per day (the key "peak load" hours), seven days a week, every day of the year for every year of the contract. Deehan/Cole pf. at 11, 14; Cater/Watts/Deehan pf. at 4; exh. Pet. Joint-3 at Section 3.2(c).

24. The HQ PPA volume increases over the first eight years as the volumes purchased under the existing HQ-VJO Contract decrease. Volume also is reduced during the last three years of the agreement in order to facilitate a future transition. Deehan/Cole pf. at 11, 14; Cater/Watts/Deehan pf. at 4.

25. Under the HQ PPA, the initial Energy Quantity is equal to the current transfer capability at the Highgate interconnection, which is 218 MW. Therefore, 218 MW is the Energy Quantity allocated among the Buyers. If Highgate's transfer capability is increased to 225 MW during the term of the HQ PPA, the Energy Quantity will increase to 225 MW. Deehan/Cole pf. at 14.

26. The following tables show each Buyer's allocation of the Energy Quantity at the 218 MW and 225 MW levels:

<b>BUYERS' SHARES OF THE ENERGY QUANTITY AT 218 MW (in MW)</b>						
	<b>Nov. 1, 2012 to Oct. 31, 2015</b>	<b>Nov. 1, 2015 to Oct. 31, 2016</b>	<b>Nov. 1, 2016 to Oct. 31, 2020</b>	<b>Nov. 1, 2020 to Oct. 31, 2030</b>	<b>Nov. 1, 2030 to Oct. 31, 2035</b>	<b>Nov. 1, 2035 to Oct. 31, 2038</b>
BED	0	5	5	9	9	4
CVPS	0	83.119	94.119	95.119	105.809	22.69
GMP	4.821	65.589	75.063	75.063	79.11	18.342
Stowe	1.032	2.884	2.984	2.984	2.251	0.399
VEC	15.236	15.236	15.236	16.236	4.004	4.004
VPPSA	0.911	11.172	15.598	15.598	16.267	6.006
Vermont Marble	3	4	4	4	1.559	0.559
Total	25	187	212	218	218	56

<b>BUYERS' SHARES OF THE ENERGY QUANTITY AT 225 MW (in MW)</b>						
	<b>Nov. 1, 2012 to Oct. 31, 2015</b>	<b>Nov. 1, 2015 to Oct. 31, 2016</b>	<b>Nov. 1, 2016 to Oct. 31, 2020</b>	<b>Nov. 1, 2020 to Oct. 31, 2030</b>	<b>Nov. 1, 2030 to Oct. 31, 2035</b>	<b>Nov. 1, 2035 to Oct. 31, 2038</b>
BED	0	5	5	9	9	4
CVPS	0	85.419	96.419	98.419	112.101	26.682
GMP	7.017	67.485	76.959	76.959	81.293	20.825
Stowe	1.238	2.89	2.99	2.99	2.135	0.483
VEC	17	17	17	17	3.845	3.845
VPPSA	1.745	11.206	15.632	15.632	15.91	6.449
Vermont Marble	5	5	5	5	0.716	0.716
Total	32	194	219	225	225	63

27. The U.S. and Québec portions of the Highgate tie are currently under study, with the intent on both sides of the border to support investments necessary to reinforce its reliable operation and, if feasible, increase the capacity of the Highgate Converter to 225 MW in the near future. Deehan/Cole pf. at 14.

28. Under the HQ PPA, if a Buyer fails to obtain required regulatory or municipal approvals (a "Removed Buyer"), then the remaining Buyers have the option to assume such Removed Buyer's share subject to Board approval and HQUS's consent relating to credit and collateral requirements. However, there are no reallocations if a Buyer terminates or defaults after the HQ PPA becomes effective. Deehan/Cole pf. at 24; exh. Pet. Joint-3 at Section 2.3.

**(d) Environmental Attributes**

29. The HQ PPA requires that, for each calendar year during the term of the HQ PPA, HQUS must transfer environmental attributes associated with the energy delivered by HQUS into the New England markets in a quantity matching each Buyer's Energy Quantity and reflecting the HQP system mix, which cannot be less than 90% hydroelectricity. Deehan/Cole pf. at 14–15, 18–19; exh. Pet. Joint-3 at Section 3.3.

30. The HQ PPA obligates HQUS each year to verify the following aspects of the environmental attributes: (a) that the HQP System Mix is at least 90 percent hydroelectricity; (b) that the attributes are associated with energy that was delivered into the New England market; (c) that the attributes were owned by HQUS and were transferred to Buyers; (d) that the attributes were not transferred to any other person; (e) that the attributes were not claimed as part of energy sold elsewhere; and (e) that the attributes were not retired or used in any other program. Deehan/Cole pf. at 33; exh. Pet. Joint-3 at Section 3.3(e).

31. Under the HQ PPA, the Buyers have the right to audit the compliance of HQUS with its obligations to transfer environmental attributes. Exh. Pet. Joint-3 at Section 11.12; tr. 1/19/11 at 35 (Cole).

32. The HQ PPA requires that if HQUS fails to transfer the required amount of environmental attributes in any year, it must transfer the deficient amount within twelve months. However, if the delay would result in a penalty to the Buyers under a program in which a

monetary value for environmental attributes exists, HQUS must either transfer an amount of equivalent environmental attributes necessary to avoid the penalty or compensate the Buyers for the damages. Deehan/Cole pf. at 18–19; exh. Pet. Joint-3 at Sections 4.2(b).

33. The HQ PPA contains two revenue-sharing provisions related to environmental attributes. First, should HQUS import power over the Highgate interconnection during hours other than the HQ PPA profile hours (that is, sales other than during on-peak, seven days/sixteen hours) and sell environmental attributes associated with those imports, it must share such attribute revenue equally with the Vermont Buyers (i.e., fifty percent of the revenues would go to the Vermont Buyers), so long as Vermont law recognizes HQP hydroelectricity as renewable. Second, should a Vermont Buyer resell environmental attributes that it has purchased under the PPA, it must share the revenue generated by that sale equally with HQUS. Deehan/Cole pf. at 20; exh. Pet. Joint-3 at Sections 3.3(g) and (h).

### **(3) Collateral Agreements and Guaranty**

34. Each of the Vermont Buyers has executed a Collateral Agreement with HQUS. The Collateral Agreements govern the need for and use of collateral under transactions between each Buyer and HQUS. The agreement establishes a collateral threshold, defines how exposure to the other party will be calculated, and specifies the manner and type of additional performance assurance that can be requested. The additional performance assurance, or collateral, could take the form of a cash deposit or a letter of credit from a qualified institution. The failure of a party to perform any of the obligations in the Collateral Agreement creates an event of default under the HQ PPA and under any other potential future purchases from HQUS. Deehan/Cole pf. at 22–23; exh. Pet. Joint-4 (Conf.).

35. The Collateral Agreements provide that the Vermont Buyers will receive more favorable credit terms if the Board issues an order providing assurance of rate recovery of the HQ PPA costs, as long as the HQ PPA is prudently managed. Exh. Pet. Joint-4 (Conf.).

36. Hydro-Québec has executed a Guaranty, in favor of each Vermont Buyer, of HQUS's obligations up to a prescribed dollar limit. The Buyers have entered into an Allocation

Agreement (among the Buyers only) that allocates to each Buyer a share of the Guaranty and a share of collateral provided by HQUS. Exhs. Pet. Joint-5 and -6 (Conf.).

**(4) VPPSA Power Sales Agreements**

37. VPPSA's role with respect to the HQ PPA is as a joint action agency and power supplier, acting to facilitate the sale of the Hydro-Québec power to certain Vermont distribution utilities. Callnan pf. at 8.

38. VPPSA has offered to each of the PSA Participants the resale of VPPSA's share of the Energy Quantity under the HQ PPA. The documents that govern the sale of energy products from VPPSA to the PSA Participants are the VPPSA PSAs. Exh. VPPSA-2.

39. The monthly power costs under the VPPSA PSAs to be charged to each PSA Participant will include the pro rata share of monthly invoice costs billed by HQUS to VPPSA, any other VPPSA-incurred costs related to the administration of the HQ PPA and any costs of financing which may be necessary for the performance of the HQ PPA. Callnan pf. at 8.

**(5) WEC-VEC Suballocation Agreement**

40. WEC and VEC have reached an agreement (the "WEC-VEC Suballocation Agreement") to convey WEC's allotment under its VPPSA PSA to VEC until WEC demonstrates an actual need for the power as defined in the WEC-VEC Suballocation Agreement. Exh. WEC-4R.

41. The WEC-VEC Suballocation Agreement provides that WEC can recall its HQ PPA power allocation from VEC under two different scenarios:

- a. If there is a short-term interruption of WEC's existing supply resources, as defined under the agreement, WEC can recall its power allocation upon thirty days' advance notice to VEC of the need to take back the allocation and the amount of the allocation needed. The power allocation is returned to VEC when the short-term interruption ends.
- b. If WEC needs the power over the longer term as a result of load growth or expiration of its power resources, upon one year's notice it can permanently call back the power and related attributes from VEC. WEC is to notify VEC at the point when WEC's Real Time Generation Obligation, as measured in the preceding twelve months, reaches 97% or less of its Real Time Load Obligation.

Richards pf. at 13-14; Richards pf. reb. at 5; exh. WEC-4R.

42. VEC would pay WEC for the HQUS power and related transaction costs when VEC has access to the power. WEC would cover any collateral costs related to the HQUS power. Exh. WEC-4R; Kieney (VEC) pf. reb. at 2.

**(6) CVPS-Vermont Marble Assignment and Assumption Agreement**

43. CVPS and Vermont Marble have entered into an agreement by which CVPS would acquire certain assets used by Vermont Marble in the generation, transmission, and distribution of electricity. That agreement is under review by the Board in Docket No. 7660. The HQ PPA provides that if the Board approves CVPS's purchase of the Vermont Marble assets, Vermont Marble may assign its allocation to CVPS. Vermont Marble and CVPS have executed an Assignment and Assumption Agreement to enable them to effectuate the assignment, following Board approval in Docket No. 7660. Petition at 13; Allard pf. at 22; exh. Pet. Joint-3 at Section 3.2; exh. VMPD-2.

**Discussion re Proposed Transactions**

Section 248(a)(1)(A) of Title 30 requires that a company subject to the Board's jurisdiction must obtain a CPG before it may "in any way purchase electric capacity or energy from outside the state, for a period exceeding five years, that represents more than one percent of its historic peak demand . . . ." Section 248 approval is required for the Vermont Buyers' purchase of power under the HQ PPA, the PSA Participants' purchases under the VPPSA PSAs, VEC's purchase under the WEC-VEC Suballocation Agreement, and the CVPS-Vermont Marble Assignment and Assumption Agreement.

Section 108 of Title 30 requires Board approval prior to certain utility financings. In the current proceeding, VPPSA, Vermont Marble, Stowe and WEC have requested authorizations under Section 108 to enter into Collateral Agreements with HQUS. Each Collateral Agreement contains a pledge to HQUS of a security interest in the collateral, which could include, among other things, cash or letters of credit issued by a Buyer to HQUS.

Subsequent sections of this Order set forth the Board's findings and conclusions addressing whether these required approvals should be issued.

**B. Applicable Section 248(b) Criteria****Present and Future Demand for Service**

[30 V.S.A. § 248(b)(2)]

**Findings**

44. The purchase under the HQ PPA by each of the Petitioners is required to meet the need for present and future demand for service which could not otherwise be provided in a more cost-effective manner through energy conservation programs and measures and energy efficiency and load management measures, including but not limited to those developed pursuant to the provisions of subsection 209(d), section 218c and subsection 218(b) of Title 30. This finding is supported by findings 45 to 120, below.

45. The HQ-VJO Contract, which supplies up to a maximum of 310 MW of power to the State, will phase out beginning in 2012, and a large portion of HQ-VJO Contract deliveries terminate between 2012 and 2015, with the last schedule expiring by 2020. Deehan/Cole pf. at 6 and 13.

46. The HQ-VJO Contract and the VY Contract, which expires in 2012, supply in aggregate at least 590 MW, or roughly two-thirds of Vermont's current power requirements. Deehan/Cole pf. at 5–6.

47. The expiration of the HQ-VJO Contract and the VY Contract creates the potential for a significant power supply gap for Vermont distribution utilities, as a whole, between committed supply resources (via contract or generation) and projected load requirements. Deehan/Cole pf. at 6; Lamont pf. at 4.

48. To replace power purchases under expiring contracts, Vermont utilities should seek to acquire power supplies that are reliable, stably priced, affordable and as low in carbon emissions as current resources to reduce the economic exposure of Vermont ratepayers. Replacement power can be purchased through the ISO-NE regional power market, but the price of replacement power in this market is volatile. Deehan/Cole pf. at 4–6.

49. The estimates of energy efficiency potential used by the Petitioners in their need analyses relied primarily upon the State Energy Efficiency Utility ("EEU") statewide projections. Deehan/Cole pf. at 28; Cater/Watts/Deehan pf. at 12; tr. 1/19/11 at 124 (Smith).

50. Current EEU forecasts result in energy efficiency and load response measures holding consumer demand to roughly current levels, which leaves a large gap to replace the energy currently provided by the HQ-VJO Contract and the VY Contract. Deehan/Cole pf. at 28.

51. Even under the most aggressive projections for Demand Side Management ("DSM") impacts, a significant residual load remains to be served by generation projects. Current Department estimates of the efficiency potential are on the order of 15%. Even if one assumes those savings can be achieved in a very short time, the open positions of the Petitioners created as a result of expiring contracts would remain significant. Lamont pf. at 4–5.

52. The HQ PPA will replace in aggregate from 218 to 225 MW of the 310 MW maximum of the HQ-VJO Contract power at a slightly lower annual capacity factor (66.7% vs. 75%). The HQ PPA will thus replace approximately 65% of the existing HQ-VJO Contract. Deehan/Cole pf. at 14.

53. Relative to the energy provided by both the HQ-VJO Contract and VY Contract, the HQ-PPA will replace only about 30% of the total reduction in energy supply. Deehan-Cole pf. at 13–14.

#### *CVPS*

54. The CVPS power portfolio is dominated by the HQ-VJO Contract and the VY Contract. The VY Contract supplies CVPS with about 175 MW of capacity and 1.4 million MWh of energy each year, and the HQ-VJO Contract supplies CVPS with 143 MW of capacity and over 900,000 MWh of energy. Cater/Watts/Deehan pf. at 8.

55. With the expiration of both the HQ-VJO Contract and the VY Contract, CVPS faces a major gap in its power supply energy portfolio within the next six years. CVPS will be left with about 120 MW of capacity and 600,000 MWh of annual energy supply, which represents only about 25% of its power needs. Beginning in November 2016, CVPS's energy deficiency will amount to about 175 MW per hour on average, or about 2/3 of its average load. Cater/Watts/Deehan pf. at 9; exh. CVPS-4.

56. This deficiency will be even greater in the on-peak periods, averaging over 200 MW per hour, growing to about 250 MW per hour in later years. Cater/Watts/Deehan pf. at 9; exh. CVPS-4; exh. CVPS-5.

57. Moreover, this deficiency is forecast to grow over time as CVPS loses its remaining VEPP, Inc. ("VEPPI") power and certain other power entitlements, while load obligations are expected to remain within a relatively narrow band. Cater/Watts/Deehan pf. at 9; exh. CVPS-4.

58. The HQ PPA would meet approximately 20% to 25% of CVPS's annual energy requirements projected for the 2017 to 2035 period. Cater/Watts/Deehan pf. at 10.

59. Even after taking into account the power to be purchased under the HQ PPA and other pending purchases, CVPS is left with an average deficiency totaling approximately 110 MW per hour growing in later years to 140 MW per hour (1 million MWh per year growing to about 1.3 million MWh). Cater/Watts/Deehan pf. at 10; exh. CVPS-4; exh. CVPS-5.

60. CVPS's annual retail load obligation is currently about 2.35 million MWh and will increase by about 0.2 million MWh if CVPS completes the purchase of the electric assets of Vermont Marble. CVPS's load is then projected to decrease slowly for a period of time. Cater/Watts/Deehan pf. at 11.

61. CVPS's load projection was based upon a 2009 forecast of retail sales prepared by ITRON for CVPS for 2010 to 2016. This forecast was extended out to 2038 using a 0.1% annual decrease. Cater/Watts/Deehan pf. at 11.

62. The forecast was adjusted to account for energy efficiency savings estimates from the so-called "Forecast 20" that was used to develop the EEU's statewide plans and budget. Cater/Watts/Deehan pf. at 12.

63. Under any reasonable expectation with respect to the effect of efficiency on electricity demand, CVPS will be left with a very sizable gap of more than 100 MW per hour. As such, the supply gap that remains represents demand that cannot be met more cost effectively with energy efficiency. Cater/Watts/Deehan pf. at 10; Lamont pf. at 4.

64. Load management and demand reduction activities primarily tend to affect the timing of consumption and therefore the need for capacity, but not the overall need for energy. Since the HQ PPA does not include the purchase of capacity, there would be little effect of load

management and demand reduction activities on CVPS's energy requirements.

Cater/Watts/Deehan pf. at 10.

65. Accordingly, CVPS has demonstrated a need in accordance with Section 248(b)(2) of Title 30 to purchase its share of electric energy as provided in the HQ PPA, up to an additional 25 MW of energy if the allocations of any other Buyers become available under Section 2.3 of the HQ PPA and the allocation of Vermont Marble under the HQ PPA if CVPS completes the acquisition of Vermont Marble's electric assets as proposed in Docket 7660. *See*, findings 26, 45 to 64, above; exh. Pet. Joint-3 at 15.

### *GMP*

66. The HQ-VJO and VY Contracts together account for roughly three quarters of the annual GMP energy supply. Smith pf. at 7.

67. In addition to expiration of the HQ-VJO Contract (in late 2015, in the case of GMP) and the VY Contract, GMP's purchases from VEPPI are scheduled to expire over the next decade and purchases from the Ryegate wood-fired facility (which represents roughly 6 MW of baseload supply for GMP) will expire in 2012. Smith pf. at 7.

68. GMP will need substantial new power-supply arrangements — including long-term resources that feature meaningful price stability, low emissions profiles, and renewable resources — to replace these expiring long-term contracts. Smith pf. at 7; Smith pf. reb. at 2; exh. Pet.-DCS-2 (Revised).

69. GMP's projected open position from 2017 forward is over 50% of its projected load requirements. Smith pf. reb. at 7.

70. The HQ PPA would provide roughly 20% of GMP's annual energy requirements, leaving about half of those requirements to be met with future resources including energy efficiency and load management measures. Energy efficiency can not be expected to meet all of GMP's resource needs cost-effectively. Smith pf. at 41; Smith pf. reb. at 7.

71. Accordingly, GMP has demonstrated a need in accordance with Section 248(b)(2) of Title 30 to purchase its share of electric energy as provided in the HQ PPA and up to an additional 10 MW of energy if the allocations of any other Buyers become available under

Section 2.3 of the HQ PPA. *See*, findings 26, 45 to 53 and 66 to 70, above; exh. Pet. Joint-3 at 15.

### *VEC*

72. VEC is projecting a need for energy (an open position) of 16.1% in 2012. By 2013, the first full year of the proposed contract, the open position increases to 40.3% due the expiration of (1) the VY Contract, (2) Schedules C-1 and C-2 of the HQ-VJO Contract, and (3) several VEPI contracts. VEC's open position increases to 80.2% by 2015 with the expiration of various short-term contracts. The open position grows slightly each year thereafter due to expected load growth and the expiration of VEPI contracts and the remaining schedules of the HQ-VJO Contract. Kieny (VEC) pf. at 6; exh. VEC-1.

73. Taking into account VEC's currently committed resources as well as its pending and proposed resources (not including the proposed HQ PPA), VEC still has an open position of 26.3% in 2013 and 66.0% in 2015. The pending and proposed resources include a 10 MW fixed-price contract with First Wind from its project in Sheffield, an 8 MW entitlement of the Kingdom Community Wind project in Lowell, and VEC's projected share of SPEED Standard Offer Contracts. Kieny (VEC) pf. at 6-7; exh. VEC-2.

74. Including the power to be purchased under the HQ PPA as well as other pending and proposed purchases, VEC is projecting a 6.1% open position in 2013 and a 45.6% open position in 2015. Kieny (VEC) pf. at 7; exh. VEC-3.

75. Including the WEC entitlement of up to 4.0 MW under the WEC-VEC Suballocation Agreement does not impact VEC's open position in 2013 to 2015, but it reduces VEC's open position to 36.5% in 2017, the first full year VEC may purchase a portion of WEC's entitlement. Kieny (VEC) pf. at 7; exh. VEC-4.

76. After taking into account load reductions from energy efficiency programs and pending and proposed resources, the power from the HQ PPA is needed even if VEC's net load forecast is overstated by 6.1% in 2013 and over 35.0% in 2017 and beyond. Kieny (VEC) pf. at 9.

77. Accordingly, VEC has demonstrated a need in accordance with Section 248(b)(2) of Title 30 to purchase its share of electric energy under the HQ PPA as set forth in finding 26,

above, the portion of WEC's share (up to 4 MW) of HQ PPA electric energy VEC may purchase under the WEC-VEC Suballocation Agreement and up to an additional 25 MW of energy if the allocations of any other Buyers become available under Section 2.3 of the HQ PPA. *See*, findings 26, 45 to 53 and 72 to 76 , above; exh. Pet. Joint-3 at 15; Kieny (VEC) pf. at 8-9.

*Stowe*

78. Stowe has sufficient committed resources to cover and/or hedge approximately 57.6% of its projected annual energy requirements for 2012 and, thus, is projecting an open position of 42.4% in 2012. In 2013, which would be the first full year of the HQ PPA, the open position is projected to increase to approximately 54.4% with the expiration of Schedules C-1 and C-2 of the HQ-VJO Contract, Worumbo Hydro and several VEPPI contracts. Stowe's open position is projected to increase to 77.3% by 2016 with the expiration of Schedules B and C-3 of the HQ-VJO Contract. The open position grows slightly each year thereafter due to load growth and the expiration of VEPPI contracts. Kieny (Stowe) pf. at 6.

79. Even when the power to be purchased under the HQ PPA and other pending and proposed purchases are considered, Stowe is projecting a 41.1% open position in 2013 and 50.8% in 2016. Kieny (Stowe) pf. at 7.

80. In the event the Highgate's transfer capability is increased from 218 MW to 225 MW during the term of the HQ PPA, Stowe's entitlement will either increase less than 0.25% or decrease for each of the four schedule periods between 11/1/2015 and 12/31/2035, which periods comprise 88% of Stowe's entitlement under the HQ PPA. Kieny (Stowe) pf. at 3–5.

81. Stowe's base load forecasts are based on an average of the years 2007 to 2009, the high load forecast is conservatively escalated 0.5% per year through 2038 while the low load forecast is decreased by 5%. Under any of these scenarios Stowe will have a need for its entitlement under the HQ PPA. Kieny (Stowe) pf. at at 7.

82. Accordingly, Stowe has demonstrated a need in accordance with Section 248(b)(2) of Title 30 to purchase its share of electric energy under the HQ PPA as set forth in finding 26, above. *See*, findings 26, 45 to 53 and 78 to 81, above.

*BED*

83. BED is presently facing a significant gap in its power-supply portfolio, which amounts to approximately 40% of its current load by 2015. Nolan pf. at 5; exh. BED-2.

84. Given its lack of supply from either the HQ-VJO Contract or the VY Contract, BED has been making market power purchases for several years, while simultaneously seeking long-term renewable supply. BED routinely purchases its supply needs in the short-term market, typically seeking 10 to 15 MW around the clock on a calendar-year basis. BED also purchases up to an additional 15 MW during specific months of the year, such as during its peak load months of July and August. Nolan pf. at 5.

85. BED's allocation of HQ PPA energy, regardless of whether the transfer capability at Highgate is 218 MW or 225 MW, is 5 MW from November 1, 2015, to October 31, 2020, 9 MW from November 1, 2020, to October 31, 2035, and 4 MW from November 1, 2035, to October 31, 2038. Nolan pf. at 3-4.

86. BED's proposed purchase of 5 MW from 2015 through 2020 amounts to approximately 9% of BED's annual energy requirements, and the 9 MW commencing in 2020 amounts to approximately 17.5% of its annual energy requirements. Nolan pf. at 5.

87. BED projects its future supply requirements using the "High DSM" case of its Board-approved 2008 Integrated Resource Plan ("IRP"). Nolan pf. at 6-7.

88. BED's proposed purchase under the HQ PPA is needed to meet its projected load requirements which are based on the "High DSM" scenario in its IRP. Nolan pf. at 6-7; exhs. BED-2 and BED-3.

89. Accordingly, BED has demonstrated a need in accordance with Section 248(b)(2) of Title 30 to purchase its share of electric energy under the HQ PPA as set forth in finding 26 above. *See*, findings 26, 45 to 53 and 83 to 88, above.

*Vermont Marble*

90. Vermont Marble currently meets one-third of its load requirements through its own generation with the other two-thirds met through market purchases, short-term bilateral contracts and the HQ-VJO Contract, under which Vermont Marble's entitlement of 2.048 MW will expire

in 2012. Approximately 63% of Vermont Marble's system requirements are currently met by short-to-medium-term contracts and/or spot-market purchases, which results in significant pricing volatility. Allard pf. at 6–7.

91. With the near-term expiration of various bilateral contracts, including its participation in the HQ-VJO Contract, Vermont Marble is facing a large gap of 16 MW between its load requirements and the committed resources to serve this load. Allard pf. at 10; exh. VMPD-1.

92. The size of Vermont Marble's need is such that efficiency and load management measures, regardless of their cost, cannot be relied upon to close the gap between its requirements and its ability to serve its own load. Allard pf. at 10.

93. The reliance on open market purchases to close the supply gap exposes Vermont Marble's ratepayers to price volatility. Allard pf. at 10.

94. The HQ PPA will reduce Vermont Marble's supply gap and reduce its exposure to market-price volatility by providing a supply of energy that is stably priced but still tied to market price. Allard pf. at 11.

95. Vermont Marble anticipates that the HQ PPA will meet approximately 15% of its annual electricity requirements over the projected years. Allard pf. at 11.

96. Accordingly, Vermont Marble has demonstrated a need in accordance with Section 248(b)(2) of Title 30 to purchase its allocation of electric energy under the HQ PPA as set forth in finding 26 above. *See*, findings 26, 45 to 53 and 90 to 95, above; Allard pf. at 10–14.

#### *VPPSA Municipalities through VPPSA*

97. VPPSA's role as a purchaser of power under the HQ PPA is to facilitate the purchase of this power by the VPPSA Municipalities and WEC. VPPSA has made arrangements to resell the entire amount of any electric energy purchased by it under the HQ PPA to the PSA Participants under the VPPSA PSAs. Callnan pf. at 8; *see*, findings 26, 37–39, above.

98. Each VPPSA Municipality will be offered, as a PSA Participant, a portion of VPPSA's purchase share under the HQ PPA based on the 2009 Real Time Load Obligation of its system. Should any PSA Participant decline to take all or a portion of its pro rata share, VPPSA will

re-offer the remainder of the share to the other PSA Participants pro rata based on their initial allocation. Callnan pf. at 9; exh. VPPSA-5.

99. With the exception of Swanton, all maximum allocations listed in the table included in finding 110 below are based on the VPPSA's Municipalities' needs as determined by analyzing their existing resource portfolios in the context of their forecasted load projections. Swanton's allocation in the table is based on its pro rata share of VPPSA's total allocation. Callnan pf. at 13.

100. Roughly 30% of the VPPSA Municipalities' power supply resources, mainly obtained through market contracts, expired in 2009. The need for power is expected to continue to grow, and reach over 80% of forecasted needs with the assumed loss of the McNeil generating plant in 2029. Callnan pf. at 15; tr. 1/20/11 at 45–46 (Callnan); exh. VPPSA-7.

101. Each spring and fall, VPPSA has been procuring wholesale power to meet a portion of its members' forecasted needs. This program was designed to purchase approximately 25% of future needs up to two years in advance of the date the power would be needed. The design concept of the program centers on the dollar cost averaging of four separate price points for any given year of forecasted power needs. This program is intended to supplement any purchases that were made if the market prices fell low enough to economically purchase power that would not have upward rate pressure on each VPPSA Municipal system's power portfolio costs. The years of 2009 and 2010 have seen falling power prices that allowed VPPSA to purchase annual contracts with separate vendors through 2016. VPPSA's current vendors for wholesale power that are not associated with a specific generator are unwilling to contract for power with VPPSA beyond six years. Callnan pf. at 15.

102. This environment makes a reasonably priced, longer-term power agreement beyond six years beneficial for least-cost planning purposes. VPPSA has been active in its planned purchase program, fulfilling 90% or more of the VPPSA Municipalities' forecasted needs through 2015 and close to 65% of their forecasted needs through 2016. Less than 50% of the VPPSA Municipalities' needs will be met by the year 2017. Participation in the HQ PPA will help increase the coverage of the open positions of VPPSA Municipalities to approximately 65% for

the year 2017 and above 55% through 2029. Callnan pf. at 15–16; exh. VPPSA-3 & 7; tr. 1/20/11 at 45–46 (Callnan).

103. VPPSA has forecast the needs of the VPPSA Municipalities using a software product that utilizes regression analysis to predict future needs. The efforts of the EEU and individual system upgrades to their distribution systems are assumed in the load data that are used in the load forecasting model. VPPSA has assumed that these conservation and energy efficiency projects will continue into the future at the same level as they have in the past. VPPSA's current load forecasting model is predicting a need greater than 50% beginning in the year 2017. Even if conservation and energy efficiency efforts are increased substantially, there will still be a need for the HQ PPA. Callnan pf. at 16–17; exh. VPPSA-7; *see also*, tr. 1/20/11 at 183 (Lamont).

104. Swanton is unique among the VPPSA Municipalities in that it has a large amount of internal generation which should cover a substantial portion of its future load. Callnan pf. at 13.

105. Swanton is heavily reliant on a single source of generation, the Highgate Falls generation station ("Highgate Falls"). Approximately 80% of Swanton's need is met by Highgate Falls, which is both intermittent (hydroelectric) and dependent on the water flow of another hydroelectric facility upstream. Callnan pf. at 3; tr. 1/20/11 at 38–42 (Callnan).

106. Because of its dependence on Highgate Falls, Swanton is exposed to the price volatility of the wholesale power market when generation from Highgate Falls does not meet Swanton's needs for power. There are times during each year when hydroelectric production will not meet Swanton's load requirements. These times of low production typically correspond to high market prices. Swanton can also experience annual shortages of water flow that can cause reduced electric production. This scenario could happen anytime during the twenty-six year life of the HQ PPA. Callnan pf. at 13–14; tr. 1/20/11 at 38, 39, 41, 43, 54 and 55–56 (Callnan); *see also*, tr. 1/20/11 at 188, 197 (Lamont); exh. VPPSA-6.

107. Swanton experienced water discharges (measured as a daily mean in cubic feet per second) as high as 2501 in 2004, 2258 in 2000 and 2200 in 1996 and as low as 1137 in 1999, 1190 in 1995 and 1263 in 2001. Exh. VPPSA-8.

108. In addition, Swanton's internal generation is dependent on the output of the Sheldon Springs hydroelectric facility, which is upstream of Swanton's facility. This can add another

layer of unpredictability to Swanton's internal generation should the Sheldon Springs hydroelectric facility change its historical operating procedure. Tr. 1/20/11 at 41 (Callnan).

109. The purchase as a PSA Participant of electric energy provided under the HQ PPA will provide Swanton with resource diversity for the life of the HQ PPA and coverage for its load should it lose its internal generation based on an unanticipated outage. The allocation to Swanton is consistent with Vermont's overall approach to the HQ PPA that each distribution utility should have an opportunity to fully participate in the contract. Callnan pf. at 14; tr. 1/20/11 at 43.

110. Accordingly, each of the Municipal Utilities has demonstrated a need in accordance with Section 248(b)(2) of Title 30 to purchase its share of the allocation of electric energy purchased by VPPSA under the HQ PPA up to the maximum amounts applicable to each Municipal Utility as set forth in the table below:

<b>VPPSA Municipalities</b>	<b>Nov. 1, 2012 to Oct., 31, 2015</b>	<b>Nov. 1, 2015 to Oct. 31, 2016</b>	<b>Nov. 1, 2016 to Oct. 31, 2020</b>	<b>Nov. 1, 2020 to Oct. 31, 2030</b>	<b>Nov. 1, 2030 to Oct. 31, 2035</b>	<b>Nov. 1, 2035 to Oct. 31, 2038</b>
Barton	0.105	0.757	1.048	1.161	1.306	1.308
Enosburg	0.113	0.813	1.372	1.666	1.974	1.970
Hardwick	0.150	1.015	2.331	2.464	3.140	3.141
Hyde Park	0.077	1.138	1.139	1.158	1.235	1.233
Jacksonville	0.026	0.378	0.505	0.516	0.573	0.571
Johnson	0.072	0.985	1.459	1.486	1.571	1.567
Ludlow	0.229	2.307	4.100	4.300	4.973	4.955
Lyndonville	0.517	3.215	5.402	6.457	7.164	7.141
Morrisville	0.231	1.599	2.834	3.394	4.492	4.472
Northfield	0.138	1.413	2.559	2.610	3.006	3.002
Orleans	0.293	1.057	1.031	1.048	1.106	1.080
Readsboro	0.021	0.152	0.243	0.247	0.272	0.272
Swanton	0.260	1.669	1.971	1.971	2.028	0.815

Callnan pf. at 13; tr. 1/20/11 at 47–48 (Callnan). *See*, findings 45 to 53 and 97 to 109, above.

*WEC*

111. WEC currently purchases approximately 22% of its load needs or 2.589 MW through the HQ-VJO Contract. Its entitlement to this power expires on October 31, 2015. Richards pf. at 10.

112. WEC's base case load forecast projects a compounded annual growth rate of 1.3% through 2026. Richards pf. at 15; exh. WEC-2.

113. With the expiration of the existing HQ-VJO Contract, WEC's projected base case load forecast compared to existing and planned resources reveals a shortfall in 2024. The purchase of HQ PPA power under WEC's VPPSA PSA will meet the need created by this shortfall. Richards pf. at 11; exh. WEC-2.

114. In the event the Vermont Wind Project is not constructed, WEC will face a 13% gap in its power portfolio in 2016, and will need the power from the VPPSA PSA to meet its obligations to serve its members. Richards pf. at 11; exh. WEC-3.

115. WEC is also heavily dependent on its Coventry Landfill Gas to Generation Facility ("Coventry Facility"). The Coventry Facility provides a base-load resource to WEC and currently generates approximately 6 MW, which supplies approximately 70% of WEC's total load needs. This concentration of supply is a concern for WEC, and it desires to mitigate its exposure to supply interruptions. Richards pf. at 12–13.

116. The difference between WEC's base case projected Real Time Generation Obligation (including power from the Vermont Wind Project) as compared to its projected Real Time Load Obligation between 2016 and 2024 shows margins ranging from .8% to 1.4%. Exh. WEC-13E, Peak Summary Sheet.

117. There are several risks or events that could give rise to an immediate need (prior to 2024) for the HQ PPA power:

- i. The Vermont Wind Project does not come on line;
- ii. The Vermont Wind Project, which is an intermittent resource, does not deliver the anticipated thirty percent (30%) capacity factor that is assumed by the project developer;
- iii. There is a short-term interruption from the unit-contingent resource at the Coventry Facility or a short-term interruption from a wind turbine not operating at the Vermont Wind Project; and

iv. Gas production at the Coventry Facility does not materialize as projected, thereby decreasing the amount of available power.

Tr. 1/20/11 at 96–97, 107, 111–112 (Richards); Richards pf. reb. at 6–7.

118. WEC proposes to purchase, as a PSA Participant under its VPPSA PSA, 2.4 MW of HQ PPA energy from November 1, 2016, to October 31, 2030, and either 2.653 MW (under the 218 MW scenario) or 2.724 MW (under the 225 MW scenario) from November 1, 2030, to October 31, 2038. WEC purchases may increase up to a maximum of 4 MW from November 1, 2016, to October 31, 2038, if the allocations of other Petitioners become available. To mitigate potential power supply risks caused by its unit-contingent resources, WEC will use the VPPSA PSA in conjunction with the WEC-VEC Suballocation Agreement as a hedge. WEC will mitigate potential near-term (prior to 2024) supply risks by permitting WEC to take power back from VEC on a temporary basis with one month's notice during a supply interruption of existing resources. In addition, in the event WEC's load rises relative to its resources, WEC may permanently take back power with one year's notice under the WEC-VEC Suballocation Agreement. Richards pf. at 13–14; Richards pf. reb. at 4–6; Callnan pf. at 9–11; tr. 1/20/11 at 65–66 (Patt), 108–109 (Richards); *see*, findings 40 to 42, above.

119. In evaluating its need, WEC took into consideration ongoing efficiency measures including its commitment to implementing the EEU's demand side management programs. Richards pf. at 16.

120. Accordingly, WEC has demonstrated a need in accordance with Section 248(b)(2) of Title 30, subject to the rights and obligations of the parties under the WEC-VEC Suballocation Agreement, to purchase beginning on November 1, 2016, up to a maximum of 4 MW of HQ PPA power under WEC's VPPSA PSA. *See*, findings 40–42, 45 to 53 and 111 to 119, above; Richards pf. at 9; exh. WEC-4r.

## Discussion

### *Overall State Need*

The HQ PPA will meet a meaningful portion of the State's projected future demand for energy following the expiration of the HQ-VJO Contract and the VY Contract. Electric energy purchased under the HQ PPA will replace approximately 65% of the existing HQ-VJO Contract

and about 30% of the total reduction in energy supply resulting from the expiration of those two contracts. However, even when optimistic assessments of aggressive deployment strategies for efficiency services are taken into account, the need for replacement resources is significantly larger than the need met by the HQ PPA.

CLF suggests that the Petitioners have not demonstrated that the need could not otherwise be met in a more cost-effective manner through investments in energy efficiency.<sup>12</sup> CLF argues that had the utilities included energy efficiency resources in the November 2008 Request for Proposals lower bids or a lower clearing price might have been obtained.<sup>13</sup> However, CLF did not claim that all the Petitioners' projected supply needs could be met by investments in efficiency.<sup>14</sup>

As the Petitioners point out, estimates of projected energy efficiency savings were included in the Petitioners' analysis of need.<sup>15</sup> These estimates relied primarily on the EEU statewide projections. It is apparent that the gap between present and future demand for service and the supply arrangements that the Petitioners, as a whole, currently have in place to meet that need beginning in 2012 is so great that future demand could not be entirely met through energy efficiency measures. The broader context of the State's overall need for power makes it clear, at least at this stage of the committed-power-supply replacement process, that this purchase is required to meet the need for present and future demand for service which could not otherwise be provided in a more cost-effective manner through energy-conservation programs and measures and energy efficiency and load-management measures.

*Need for WEC and Swanton*

The Department contends that neither WEC nor Swanton has made an adequate showing of need under Section 248(b)(2). The Department observes that any denial of approval of the purchases by WEC and Swanton will not reduce the amount of power available for purchase under the HQ PPA, but will merely affect the allocation among the Petitioners.<sup>16</sup>

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12. CLF Proposal for Decision at 13-14.

13. Tr. 1/20/11 at 132 (Steinhurst).

14. *Id.*

15. Petitioners Reply Brief at 11.

16. Tr. 1/20/11 at 179 (Lamont).

While acknowledging that the creation of a hedge against supply interruptions could satisfy the need requirement, the Department believes that the use of purchases under the HQ PPA as a hedge against supply shortages has not been adequately justified in the case of either WEC or Swanton. In particular, the Department notes that WEC and Swanton did not provide any analysis that the HQ PPA purchase would be a better hedge option than purchasing a hedge product in the market to address supply contingencies.<sup>17</sup>

WEC acknowledges that it will not have a definite need for the power until 2024, but is concerned about its exposure to supply contingencies regarding the Vermont Wind Project and the Coventry Landfill. The WEC-VEC Suballocation Agreement, under which VEC will purchase HQ PPA power to the extent WEC does not need it, significantly limits the risk to WEC if the purchase price of the HQ PPA power exceeds the market price. VEC can meet a portion of its need for power through the contingent purchase of WEC's allocation if not needed by WEC, while WEC essentially has a hedge at no cost (except for transaction costs and the potential costs associated with providing collateral).<sup>18</sup>

The Department also challenges WEC's assessment of its need based on the Department's contention that WEC's analysis of energy efficiency alternatives should have been based on avoided costs consistent with the calculation of marginal power supply costs approved in Docket 7575. The marginal-cost calculation in Docket No. 7575 was used to support WEC's inclining-block rate design structure as this calculation (with a 2/3 renewable energy component) constituted a reasonable estimate of WEC's future marginal power supply costs. The Department contends that WEC's load forecast should have included the expanded efficiency resource potential that could be available to WEC if DSM were screened for cost-effectiveness based on the WEC-specific calculation of avoided costs in Docket 7575.<sup>19</sup>

The avoided-cost standard for statewide energy efficiency screening is based on a forecast of regional market prices. To require the use of a different avoided cost standard by individual utilities would undermine the purpose of having a statewide standard. As the Board

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17. Although no analysis was presented, WEC did provide testimony as to the unavailability of a financial or insurance product that could provide the desired hedge. Patt pf. reb. at 7; tr. 1/20/11 at 67-69 (Patt).

18. See, findings 40 to 42, 149 to 156, and the discussion under economic benefit, below.

19. Lamont pf. at 6.

specifically noted in its Order on the Department's motion for reconsideration in Docket 7575, "each utility's rates will always be based on marginal-cost calculations that differ from the statewide avoided-cost calculation."<sup>20</sup> Even in situations in which it is clear that actual avoided costs are different than the statewide standard (such as the EEU's implementation of geographic targeting services), the Board has approved the use of the statewide avoided costs for DSM cost-effectiveness screening. Accordingly, differences in the marginal-cost calculations of utilities should not affect the use of the statewide avoided-cost standard for screening of system-wide DSM for all Vermont distribution utilities.

Swanton wishes to use HQ PPA power to hedge its exposure to supply shortages resulting from its reliance on a single source of generation. During late summer months, which tend to coincide with higher market prices for power, Highgate Falls often does not provide sufficient power to meet load requirements. In addition, annual water flows are variable, and in certain low-water years, Highgate Falls does not generate enough power to meet requirements. Given these considerations, Swanton would appear to have a need to hedge this exposure. The Board does have a concern, however, about how Swanton will dispose of any HQ PPA power in the event it is not needed to meet future requirements, which is discussed below under the Section 248(b)(4) findings.

### **System Stability and Reliability**

[30 V.S.A. § 248(b)(3)]

#### **Findings**

121. The HQ PPA will not adversely affect system stability and reliability. This finding is supported by findings 13–21, above, and 122 and 123, below.

122. Because the HQ PPA is a financial energy agreement, it is unlikely to affect the physical system. The HQ PPA by itself will not cause more or less power to flow over the local transmission system than today. The HQ PPA has a designated pricing point at the Highgate AC node, but not a physical delivery point. The HQ PPA requires HQUS to deliver energy into New England. As such, this contracted energy may be settled or injected anywhere in New England.

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20. Docket 7575, Order of 12/30/10 at 6.

The ISO-NE works through Vermont Electric Power Company, Inc., to implement energy-dispatch instructions in accordance with system capabilities, and has the prime responsibility to assure system stability and reliability. Mertens pf. at 2–3.

123. The proposed HQ PPA should provide a highly reliable source of power, because energy will be supplied during the peak sixteen hours every day of the contract term and is not contingent upon any generator or interconnection facility. Deehan/Cole pf. at 4; exh. Pet. Joint-3 at Section 1.47.

### Discussion

Under the existing HQ-VJO Contract, which dates from the late 1980's, Hydro-Québec must deliver the contract's energy and capacity to the international border on specific interconnection facilities when scheduled by the Vermont Joint Owners and when those facilities in fact operate in real time. Thus, under the HQ-VJO Contract, deliveries may be interrupted if the interconnecting facilities are not available, as occurred most notably during the 1998 ice storm. In contrast, under this HQ PPA, the energy purchases are not linked to or dependent upon availability of transmission interties or particular generators.<sup>21</sup>

Because deliveries are not dependent on any particular transmission facilities, the HQ PPA should not have any adverse impact on system stability or reliability.

### **Economic Benefit**

[30 V.S.A. § 248(b)(4)]

### Findings

124. The purchase under the HQ PPA by each of the Petitioners (including, upon the satisfaction of a condition, Swanton) will provide an economic benefit to the State and its residents. This finding is supported by findings 125 to 156, below.

125. The HQ PPA is stably priced in a manner that mitigates market price fluctuation. The starting contract price in November, 2010, will be \$58.07/MWh. Thereafter it will be adjusted

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21. Deehan/Cole pf. at 7, 18. Furthermore, power markets have changed significantly in the years following the negotiation and execution of the HQ-VJO Contract. Since that time, FERC has instituted competitive wholesale power markets and open access to the transmission grid, and ISO-NE was created and now has responsibility for the operation of the New England regional wholesale power market and bulk transmission network.

annually by a formula influenced by market price conditions and inflation, but subject to a limit on single-year price changes. The annual adjustments are expected to keep the contract price closely associated with market prices during periods of moderate volatility, while significantly limiting Vermont's exposure to price spikes or sustained high-price periods. In general, this type of protection can only be obtained from resources (like renewables) that are not directly exposed to high fossil-fuel input costs. Deehan/Cole pf. at 10–11, 32; exh. Pet. Joint-3 at appendix 3.2(e); *see also*, Smith pf. at 20; Kieny (VEC) pf. at 13; Nolan pf. at 11; Callnan pf. at 17; Allard pf. at 14–19.

126. The price of power under the HQ PPA is expected to be either competitive with or favorable to forecasted market prices over its term, and lower than the price of currently available power sources with similar characteristics, while offering other favorable characteristics (low air emissions, relative price stability, renewable fuel, not unit-contingent, and with the potential for power system benefits). Smith pf. reb. at 5–7; Smith pf. at 20, 30; Kieny (VEC) pf. at 13–14, 16–17; Cater/Watts/Deehan pf. at 20–21; *see also*, Richards pf. at 25–26; Nolan pf. at 10–12; Callnan pf. at 19; Kieny (Stowe) pf. at 10–13.

127. The economic benefit of purchases under the HQ PPA can be assessed in terms of the power-cost benefits anticipated from the HQ PPA. This economic benefit is driven by the relationship over time between the contract price and market price, which is essentially the same for all the utilities with a demonstrated need. Each of the Petitioners (except WEC and Swanton) have a sufficiently large open position going forward that potential issues related to the interaction of their existing committed resource portfolio is non-existent due to the size of the supply gap relative to the HQ PPA. Lamont pf. at 7–11; tr. 1/20/11 at 185, 211–214. (Lamont); Callnan pf. at 13–14.

128. All of the analyses done by the Petitioners looked at the HQ PPA in essentially the same environment. While each Petitioner looked at the value of the HQ PPA from its own point of view, all were analyzing the performance of the HQ PPA relative to alternatives, mostly market based. Each of the analyses individually demonstrates that the HQ PPA will provide benefits to the State. Lamont pf. at 13.

129. While the analysis done by each Petitioner contains cases where the HQ PPA fails to perform economically in relation to market, on an expected-value basis, the Petitioners have shown the HQ PPA both to perform somewhat better than the market and to dampen the price fluctuations inherent in the energy markets. So while it is reasonable to expect that the HQ PPA will provide benefits, there may be periods when it does not. In any case, the benefits of price stability will continue. Lamont pf. at 9.

130. The analysis performed by GMP applied a long-term power planning risk analysis to evaluate the economic benefit to the State and its residents associated with the HQ PPA. GMP developed multiple market-price forecasts based on unique combinations of key variables affecting regional electricity prices, and then created forty scenarios using a Monte Carlo simulation of random draws based on the distributional probabilities associated with the variables. A commercial regional electricity market simulation model was then employed to estimate regional and Vermont-specific energy prices under each of these scenarios. Based on these results, projected market prices and HQ PPA prices over the term of the HQ PPA were compared on a net-present-value basis. Smith pf. at 21–23; Smith pf. reb. at 6–7.

131. GMP's analysis shows that the HQ PPA price is expected to be favorable to or, perhaps, roughly equivalent to the forecasted price of market power, and lower than the price of currently-available power sources with similar characteristics. The pricing formula under the HQ PPA will also provide a substantial degree of price stability relative to the wholesale market, while limiting the degree to which the HQ PPA price could turn out above market if future market prices decline. Smith pf. reb. at 6; Smith pf. at 24, 31, 33.

132. An analysis performed for VEC, Stowe and VPPSA concluded that the contract price under the HQ PPA price "will be noticeably below market if the [HQ PPA] price adjustment mechanism index were to track the projected cost of a [power purchase agreement] with the developer of a new natural gas combined cycle plant when adjusted for an assumed market value of capacity."<sup>22</sup> Due to the formula used to establish the annual contract price under the HQ PPA,

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22. As VEC's witness Craig Kieny notes:

Although the price of power in New England is currently significantly below the cost of power from a new natural gas combined-cycle power plant due to a glut of generation in the region,

(continued...)

there is a high likelihood of annual HQ PPA prices "being below the prices of alternatives from other suppliers over the long term." Kieny (VEC) pf. at 13, 15–16; Kieny (Stowe) pf. at 10, 12–13; Callnan pf. at 19.

133. WEC performed a quantitative analysis of the contract and simulated its performance using varying projections of future market prices. WEC ran twelve simulations of market price cases using varying inflation rates to test how the HQ PPA contract price would change and react to various combinations of energy market prices and inflation rates. Richards pf. at 18–25.

134. WEC's economic analysis shows that the HQ PPA would have a positive net present value under the most likely energy price and inflation scenarios. The analysis found that the HQ PPA purchases in most cases over the long term would provide an economic benefit based on the assumptions of market prices generated in the analysis. Richards pf. at 25; exh. WEC-9.

135. CVPS used three different models to evaluate the economic dimensions of the HQ PPA: (1) resource-portfolio modeling; (2) a Monte Carlo simulation; and (3) a multi-attribute scoring and ranking ("scorecard"). Cater/Watts/Deehan pf. at 15.

136. CVPS used resource-portfolio modeling to examine how incorporation of the HQ PPA into CVPS's projected supply portfolio would affect the performance of the overall portfolio in terms of cost and cost risk (or cost volatility). Cater/Watts/Deehan pf. at 16 and 27, 28.

137. The portfolio analysis performed by CVPS indicates that the HQ PPA provides an opportunity for CVPS to buy a resource that will improve its portfolio's expected performance in terms of both cost and cost risk, most materially with respect to reduced cost variance. Cater/Watts/Deehan pf. at 29–33; exh. CVPS-9 at 4.

138. To develop a model that portrays HQ PPA pricing relative to market pricing, CVPS assessed the probability distributions of key variables affecting pricing, and performed a Monte Carlo simulation from repeated randomized draws of these distributions for 2000 future scenarios. Cater/Watts/Deehan pf. at 34–35.

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22. (...continued)

eventually the glut will no longer exist, and new generation will likely be needed. At that time, or shortly thereafter, the cost of electricity in New England will likely need to approach the cost of a new natural gas plant in order to justify investment.

Kieny pf. (VEC) at 13-14.

139. The CVPS Monte Carlo analysis demonstrates that the HQ PPA (a) should increase the price stability of CVPS's supply portfolio, reducing ratepayer exposure to market-price volatility, and (b) is a fair deal relative to market, because the cost of the HQ PPA is expected to be substantially more stable than market prices and to be competitive with market prices. Cater/Watts/Deehan pf. at 20.

140. CVPS's analysis indicates that the cost variability of purchases under the HQ PPA is lower because of the pricing formula's hedging characteristics. The pricing formula removes market-price variability by blending market-price values with the influence of a broad-economy inflation measure and limiting annual price changes under the HQ PPA. Cater/Watts/Deehan pf. at 36.

141. The Scorecard was developed by CVPS as a screening tool to evaluate and rank various proposals received through a 2009 joint RFP with GMP and VEC for new power supply options. The scorecard analysis assesses important resource attributes (i.e., cost, cost risk, price stability, environmental attributes, collateral requirements, etc.) of a proposal by assigning performance scores for each attribute, calculating total weighted scores for each resource, and then comparing total scores across the resources. Cater/Watts/Deehan pf. at 15, 22–25.

142. The HQ PPA scored favorably on the scorecard analysis compared to other joint RFP resources and to other proposals received since the joint RFP concluded. Cater/Watts/Deehan pf. at 26.

143. In addition to the foregoing, the starting price for the HQ PPA, based on current market conditions with relatively low forward natural gas prices, may also provide an economic benefit. Kieny (VEC) at 17–18; Kieny (Stowe) at 14–15; Callnan pf. at 18.

144. The initial contract price of the HQ PPA (after taking into account the cost of capacity) is less than the current price under the HQ-VJO Contract. Cater/Watts/Deehan pf. at 7; tr. 1/19/11 at 106 (Cater).

145. The 7x16 energy profile of the HQ PPA will supply energy during the sixteen peak hours when energy is most needed and the spot market for energy is likely to be the most expensive. This energy profile will allow for the hedging of costs in other time frames more easily and with more cost-effective products. Few power generators are willing to offer a 7x16

energy profile without assigning a premium to cover the risk the supplier must take to liquidate or hedge the eight "shoulder" hours. Smith pf. at 33; Kieny (VEC) pf. at 17, 18–19; Kieny (Stowe) pf. at 14–15; tr. 1/20/11 at 18–19 (Kieny).

146. The HQ PPA is more reliable than typical unit-contingent purchases as the IBT transaction structure means that delivery is not contingent on the performance of any particular generating unit or transmission path. Smith pf. at 33.

147. The credit and collateral-posting requirements related to the HQ PPA are either favorable or less onerous for the Petitioners than those required in recent years in other long-term contracts, which provides an additional economic benefit. Lamont pf. at 13; Smith pf. at 35–36; Kieny (VEC) pf. at 12; Kieny (Stowe) at 10; tr. at 1/20/11 at p. 86–87 (Richards).

148. An additional economic benefit of the HQ PPA is that it will serve as a partial hedge against pass-through costs of the Regional Greenhouse Gas Initiative or other potential carbon legislation, which may require generators to pay for the emission of carbon dioxide into the atmosphere. Kieny (VEC) pf. at 12; Kieny (Stowe) pf. at 12; Callnan pf. at 18; Richards pf. at 27.

#### *WEC-VEC Suballocation Agreement*

149. The WEC-VEC Suballocation Agreement allocates WEC's share of HQ PPA power to VEC until a need for that power by WEC exists. Richards pf. at 13; *see*, findings 41 to 43 and 115 to 119, above.

150. WEC's entitlement to HQ PPA power would constitute approximately 17% of WEC's portfolio for generation resources. Tr. 1/20/11 at p. 92–93 (Richards); exh. WEC Cross-4 at Interrogatory 4, 6.

151. The WEC-VEC Suballocation Agreement in conjunction with the VPPSA PSA and HQ PPA benefits WEC and its members by providing WEC with "as needed" access to a new long-term power resource that will provide a hedge against the failure of committed generation resources to meet load requirements. These agreements also increase WEC's resource diversity, which is desirable given the dominance in WEC's power portfolio of a contingent resource, the Coventry Facility. Richards pf. at 27; Richards pf. reb. at 6–7.

152. Under the WEC-VEC Suballocation Agreement, WEC will retain the obligation to post collateral, if required, under the VPPSA PSA. Tr. at 1/20/11 at 66 (Patt), 112 (Richards); exh. WEC-4R at 8.

153. After inquiry, WEC was not able to identify and obtain a similar hedge product from the market. Patt pf. reb. at 7; tr. 1/20/11 at 67–69 (Patt).

154. The WEC-VEC Suballocation Agreement also provides benefits to VEC and its members. It provides power that is needed under any reasonable load forecast scenario. Kieny (VEC) pf. at 8; exh. VEC-4; exh. WEC Cross-3 at Interrogatory 15; *see*, findings 73 to 78, above.

155. VEC will bear no collateral obligations under the WEC-VEC Suballocation Agreement. Exh. WEC Cross-7; tr. 1/20/11 at 217 (Lamont); exh. WEC-4R at 8.

156. Under the WEC-VEC Suballocation Agreement, WEC must take back its allotment of HQ PPA power in the event of WEC's need regardless of pricing considerations. There is still a risk to VEC that it would need to replace a small portion of its power supply if WEC has a need for the power, but this risk is outweighed by the economic benefits of the WEC-VEC Suballocation for VEC. WEC's allocation under its VPPSA PSA would constitute approximately 3% of VEC's portfolio. Kieny (VEC) pf. reb. at 1–5; Richards pf. reb. at 16; tr. 1/20/11 at 75–76 (Patt); tr. 1/20/11 at 91–92 (Richards); exh. WEC-4R at 4–5; exh. WEC Cross-4 at Interrogatory 4, 6.

### Discussion

The purchase of energy by the Petitioners under the HQ PPA and related agreements is expected to provide an economic benefit to Vermont and its residents by providing a new, long-term power resource at a price that is relatively stable, competitive with, or favorable to, projected market prices and lower than the cost of other available power resources with similar characteristics. Economic benefits are also provided by the 7x16 energy profile, by the IBT transaction structure, by the relatively favorable credit terms compared to other long-term purchases and by the possible future sale or retention of environmental attributes to the extent

they may have economic value.<sup>23</sup> In addition, in light of prevailing market conditions, it would appear to be a propitious time to enter into long-term power purchase agreements.

The Department disputes the economic benefit to the State of (i) WEC's allocation under its VPPSA PSA and WEC's use of that allocation as a hedge against supply shortages, (ii) VEC's contingent purchases of power from WEC under the WEC-VEC Suballocation Agreement, and (iii) Swanton's purchase under its VPPSA PSA. In the case of WEC and Swanton, the Department contends with some justification that WEC and Swanton are using a long-term product to hedge a short-term risk. In the case of WEC, however, as discussed in more detail below, the Board believes that the WEC-VEC Suballocation Agreement sufficiently mitigates the risks to WEC.

There seems less basis for the Department's concern regarding VEC's contingent purchase under the WEC-VEC Suballocation Agreement, which the Department contends will shift an undue risk to VEC. VEC's need for additional supply resources is apparent. While VEC will need to replace the power it expects to purchase under the WEC-VEC Suballocation Agreement if WEC has a need for that power, VEC's supply exposure seems relatively limited and manageable. The WEC-VEC Suballocation Agreement would only meet approximately 3% of VEC's annual energy needs.<sup>24</sup> The disparity in the relative size of WEC's allocation compared to the respective WEC and VEC portfolios means that the risk to VEC in not having a hedge against this exposure is far smaller than the corresponding risk to WEC of being exposed to the market.<sup>25</sup>

In addition, in the case of any permanent take back of its allotment by WEC, VEC will have one year's advance notice.<sup>26</sup> VEC's analysis suggests that WEC's need created by temporary outages is likely to be infrequent, of short duration and with limited impact on the overall MWh allocation VEC would receive under the WEC-VEC Suballocation Agreement.<sup>27</sup>

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23. Even without considering this potential value of the environmental attributes, however, the HQ PPA would provide an economic benefit to Vermont and its residents. Deehan/Cole pf. reb. at 4.

24. Exh. WEC-Cross 4 at Interrogatory 6; exh. VEC-4.

25. Tr. 1/20/11 at p. 92-93 (Richards).

26. Exh. WEC-4R at 8.

27. Kieny pf. reb. at 2-4; *see also*, Petitioners' Proposed Decision at 62-63.

Because of the uncertainty as to whether WEC will need HQ PPA power before 2024, WEC has sought to meet its need for long-term resources beginning in 2024, while seeking a means to acquire power on a contingent basis if the need arises. Through the WEC-VEC Suballocation Agreement, the exposure of WEC and its members is hedged as they are largely protected from pricing and other market risks associated with reselling unneeded HQ PPA power. The same can not be said for Swanton.

Unlike WEC, which has entered into the WEC-VEC Suballocation Agreement, Swanton has not limited its price exposure related to excess supply if HQ PPA power is more expensive than market prices. Although there is an expectation over time that the cost of purchasing HQ PPA power under the VPPSA PSA would more often than not be below the cost of power that Swanton could otherwise obtain in the market (and, thereby, provide an overall economic benefit to Swanton on resale),<sup>28</sup> this is not certain and any purchase and resale transactions involve an element of speculative risk that may be inappropriate for Swanton. In any case, there will almost certainly be periods during the term of the HQ PPA when the price for HQ PPA power is greater than market prices (which may correspond to periods when Swanton cannot use the HQ PPA power).

In light of these considerations, the Department's concerns about the speculative long-term nature of Swanton's purchase of HQ PPA power are well founded. Swanton is committing to a long-term power supply that it will not use, except in the case of generation shortfalls at Highgate Falls, to meet its own load obligations. Swanton and its ratepayers will be exposed to the risk that it will not be able to dispose of any excess power at a price at or above the price of the HQ PPA power it will be required to purchase over the term of the HQ PPA. Based on the testimony of VPPSA at the technical hearing, it does not appear that Swanton has any plan as to how it will dispose of any excess HQ PPA power it acquires other than through spot-market sales.<sup>29</sup>

These concerns about Swanton's exposure to pricing risks must be balanced against Swanton's contingent need for power in the event of supply shortages from Highgate Falls and

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28. Tr. 1/20/11 at 55 (Callnan); *see also*, Callnan pf. at 19; Kieny (VEC) pf. at 13-14.

29. Tr. 1/20/11 at 49-51 (Callnan).

the other benefits to Swanton of its participation in the HQ PPA purchase.<sup>30</sup> After taking these competing factors into consideration, the Board concludes it is appropriate to condition any approval of Swanton's purchase of HQ PPA power on the mitigation of Swanton's exposure to pricing risks during periods when HQ PPA power is not required to meet Swanton's load obligations. Within 60 days of the date of this Order, Swanton shall file for the Board's approval a suballocation agreement or other arrangement similar in effect to the WEC-VEC Suballocation Agreement in allocating any excess energy and the associated pricing exposure to another Vermont distribution utility or utilities with a significant supply gap.

### **Integrated Resource Planning**

[30 V.S.A. § 248(b)(6)]

#### **Findings**

157. CVPS's, GMP's, BED's, VEC's, Vermont Marble's and WEC's purchases under the HQ PPA are consistent with the principles for resource selection expressed in those utilities' approved least-cost integrated plans. Barton's, Enosburg's, Hardwick's, Hyde Park's, Jacksonville's, Johnson's, Ludlow's, Lyndonville's, Morrisville's, Northfield's, Orleans', Readsboro's, Stowe's, and Swanton's purchases under the HQ PPA are consistent with the principles of least-cost integrated resource planning, as defined in 30 V.S.A. § 218c. This finding is supported by findings 158 - 168, below.

158. The HQ PPA is part of CVPS's efforts to implement the power-supply portion of its Integrated Resource Plan ("IRP") through a diverse program of competitive Request for Proposals processes, bilateral negotiations and SPEED standard-offer resources. Cater/Watts/Deehan pf. at 36–37.

159. In its approved IRP, CVPS developed a screening tool to examine various attributes associated with different power-supply options. CVPS used this approach (as well as additional

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30. The Board also notes that the opportunities for Swanton (like WEC) to be able to purchase a small block of power from HQUS on the terms provided under the HQ PPA are limited. Richards pf. reb. at 7. In addition, WEC's testimony as to the unavailability of a financial or insurance product that could provide the desired hedge would almost certainly apply to Swanton as well. Patt pf. reb. at 7; tr. 1/20/11 at 67-69 (Patt).

modeling efforts) in evaluating the HQ PPA. This evaluation demonstrated a consistency with CVPS's IRP. Lamont pf. at 14.

160. GMP's approved IRP includes a resource strategy that focuses on cost, carbon and reliability. The IRP evaluated a range of potential portfolio strategies from the perspectives of projected costs, potential cost variance, air emissions, and flexibility. The IRP indicated that the resource portfolios of choice would likely include significant amounts of power from Hydro-Québec. The IRP action plan included, among other items, exploring opportunities for a potential future contract opportunity with Hydro-Québec. Smith pf. at 13–15; Lamont pf. at 14.

161. BED used its approved IRP decision-analysis methodology to compare the HQ PPA to other renewable resources previously evaluated; the HQ PPA compared vary favorably to other options. In addition, BED analyzed the HQ PPA by inserting it into its IRP analysis as closely as possible, and this analysis showed that the HQ PPA met the IRP goals on every measure. Nolan pf. at 12; Lamont pf. at 15.

162. VEC's approved IRP states that a contract with Hydro-Québec:

may have value over other market purchases if prices comparable to those assumed in [the power supply analysis conducted in the IRP] can be negotiated. Or if credit terms are more favorable than other suppliers required [sic].

Kieny (VEC) pf. at 21-22.

163. The Supply Resource Action Plan in VEC's IRP states:

As determined in this IRP study, VEC can possibly meet its object of stable rates and lessened environmental impact by . . . [p]articipat[ing] in discussions with Hydro Quebec . . . to attempt to negotiate long-term, stably priced contracts for energy and/or capacity.

Kieny (VEC) pf. at 22.

164. The HQ PPA is consistent with VEC's resource plans as described in its approved IRP. Lamont pf. at 15.

165. A market-based contract with Hydro-Québec is a preferred alternative in Vermont Marble's approved IRP. Lamont pf. at 15; Allard pf. at 19.

166. WEC's approved IRP provides that WEC should pursue the following key objectives: minimize power-supply-related revenue requirements; reduce power-supply risks and cost variance; promote long-term financial stability; and increase WEC's percentage of Vermont-

based renewable power supply. WEC's power purchase under the HQ PPA is consistent with the objectives and action plan in its approved IRP. The HQ PPA contract structure, paired with the structure of the WEC-VEC Suballocation Agreement, will allow WEC to minimize power-supply-related revenue requirements, reduce power-supply risk and cost variance, and as a consequence, promote long-term financial stability. Richards pf. at 28–29.

167. Barton, Enosburg, Hardwick, Hyde Park, Jacksonville, Johnson, Ludlow, Lyndonville, Morrisville, Northfield, Orleans, Readsboro, Stowe and Swanton do not currently have IRPs that have been approved by the Board. Dockets 7359-7370, 7372, Order of 2/18/11 at 2; Docket 7371, Order of 3/31/11 at 2.

168. Analysis demonstrates that, for the utilities that do not have an approved IRP, the proposed purchases of HQ PPA power are consistent with the guidelines of an IRP using the principles of least-cost planning. Callnan pf. reb. at 3; Kieny (Stowe) pf. at 18–19.

### Discussion

CVPS, GMP, BED, VEC, Vermont Marble and WEC have approved IRPs. They have demonstrated that their purchases under the HQ PPA are consistent with the principles for resource selection expressed in their approved IRPs.

Barton, Enosburg, Hardwick, Hyde Park, Jacksonville, Johnson, Ludlow, Lyndonville, Morrisville, Northfield, Orleans, Readsboro, Stowe and Swanton do not currently have approved IRPs.

The legislative act creating the Section 248(b)(6) requirement states that the Board may grant a CPG:

for a utility which does not have an approved least cost integrated plan; provided that the board shall consider in its review under that section those environmental effects which the utility must consider in developing a least cost integrated plan.<sup>31</sup>

Consistent with that legislation, Board Rule 5.404(B) states that:

Any petition from an investor-owned utility, municipal electric department, or cooperative electric utility which does not have an approved integrated resource plan pursuant to 30 V.S.A. § 218c must provide evidence that its proposed project

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31. P.A. No. 259, § 8 (1992 Vt., Adj. Sess.).

complies with principles of integrated resource planning, as defined in 30 V.S.A. § 218c, including consideration of environmental effects.

The evidence demonstrates that the proposed HQ PPA power purchases by Barton, Enosburg, Hardwick, Hyde Park, Jacksonville, Johnson, Ludlow, Lyndonville, Morrisville, Northfield, Orleans, Readsboro, Stowe and Swanton comply with the principles of integrated resource planning. After reviewing this evidence, the Board determines that these utilities' proposed purchases of HQ PPA power are consistent with the principles of least-cost integrated resource planning, as defined in 30 V.S.A. § 218c.

### **Compliance with Electric Energy Plan**

[30 V.S.A. § 248(b)(7)]

#### **Findings**

169. The purchases under the HQ PPA are in compliance with the electric energy plan approved by the Department under Section 202 (i.e., the *Vermont Electric Plan*). This finding is supported by findings 170 - 172, below.

170. The Vermont Electric Plan prioritizes the acquisition of power from "clean and stable" resources. Exh. Board-1 at 10–20.

171. The Vermont Electric Plan recognizes the importance of non-carbon emitting resources as a source of electricity. Lamont pf. at 16.

172. The Department has determined that the HQ PPA is consistent with the *Vermont Electric Plan*, in accordance with 30 V.S.A. § 202(f). Exh. DPS-5.

### **Service by Existing Infrastructure**

[30 V.S.A. § 248(b)(10)]

#### **Findings**

173. The Project can be served economically by existing or planned transmission facilities without undue adverse effect on Vermont utilities or customers. Unlike the current HQ-VJO Contract, the energy to be provided under the HQ PPA is not linked to specified interconnection facilities or interties, and therefore this HQ PPA will not require new transmission investment. Deehan/Cole pf. at 29.

### **C. Overall Public Good**

In addition to factors specifically enumerated in 30 V.S.A. § 248(b), 30 V.S.A. § 248(a) also requires the Board to consider "the general good of the state." One aspect of such review is potential impacts on Vermont that arise outside of the state, but that may indirectly affect the State's environment.

#### **(1) Effect of HQ PPA on Construction of Power Plants in Québec**

##### **Findings**

174. The HQ PPA will replace approximately 65 percent of the existing HQ-VJO Contract. The HQ PPA volume phases in during the first eight years as the volumes purchased under the existing HQ-VJO Contract phase down. Findings 24 and 52, above.

175. HQP currently has approximately 41,000 to 42,000 MW of generating capacity. Approximately 97 to 98 percent of HQP's power system portfolio is produced by hydroelectric facilities. Tr. 1/19/11 at 36–38 (Deehan).

176. According to HQP's most recent Strategic Plan, HQP has a surplus of approximately 10 TWh (approximately 5 percent), and is expecting to add another 10 TWh (an additional 5 percent) of hydroelectric supply by 2014. Deehan/Cole pf. at 19; Deehan/Cole pf. reb. at 6.

##### **Discussion**

CLF asserts that the HQ PPA is likely to lead to construction of new power generation plants in Québec, and that the Petitioners have failed to evaluate the environmental impacts of this new construction.<sup>32</sup> The Petitioners argue that because the HQ PPA represents a

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32. CLF Brief at 10-12. The Board's previous Orders have made clear that the Board has jurisdiction over environmental impacts of generation projects beyond the state only to the extent that those impacts affect the general good of the state. *See*, Docket 5330, Order of 9/21/89 at 4. Therefore, we assume that CLF is referring to environmental impacts that affect the general good of Vermont, although this is unclear from CLF's brief. However, as explained below, we do not need to address this issue because the HQ PPA should not cause new construction in Québec.

replacement of only approximately two-thirds of the current HQ-VJO Contract, there is no new demand that could "cause" new construction necessitating environmental review.<sup>33</sup>

In Docket 5330, the Board's review of Vermont utilities' petition for a certificate of public good for the HQ-VJO Contract, the Board concluded that approval of that contract should not cause the construction of major new facilities on the Hydro-Québec system. Among the reasons cited by the Board for this decision was that the HQ-VJO Contract extended, but did not appreciably expand, the then-existing flows of power from Hydro-Québec to Vermont. A second reason was that the HQ-VJO Contract was a system power contract, and Hydro-Québec was required to deliver power pursuant to that contract whether or not any new facilities were constructed.<sup>34</sup>

This decision was upheld by the Vermont Supreme Court, which stated:

[O]nly the broadest understanding of causation could attribute the immense dam construction projects planned by [Hydro-Québec] to the relatively minute Vermont power purchase. The Board had to determine the point at which there was no "but for" relationship between the power purchase and the facilities construction. The line it drew is reasonable in light of the evidence before the Board, and we will not disturb it.<sup>35</sup>

In the present instance, the HQ PPA would replace only approximately two-thirds of the power currently flowing to Vermont pursuant to the HQ-VJO Contract. In addition, the HQ PPA requires HQUS to deliver the power regardless of whether any new facilities are constructed on HQP's system. For both these reasons, consistent with the Board's decision in Docket 5330, we conclude that approval of the HQ PPA should not cause the construction of major new facilities on the HQP system. Therefore, there is no need to evaluate the possible environmental impacts of new generating plants in Québec in this proceeding.

## **(2) Environmental Attributes**

### **Findings**

177. Findings 29 - 33 are incorporated here by reference.

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33. Petitioners Reply Brief at 10.

34. Docket 5330, Order of 10/12/90, Vol. I at 28.

35. *In Re Petition of Twenty-Four Vermont Utilities*, 159 Vt. 339, 354, 618 A.2d 1295 (1992).

178. The Green-e standard and all state Renewable Portfolio Standard ("RPS") markets in New England which rely upon the New England Power Pool ("NEPOOL") Generation Information System ("GIS") are based upon annual reporting and verification protocols. Deehan/Cole pf. reb. at 5.

179. Environmental attributes reflecting the HQP system mix are not currently traded within New England and do not currently qualify for any New England Renewable Energy Certificate ("REC") program. Deehan/Cole pf. at 32.

### Discussion

Every MWh of electricity produced has environmental attributes associated with it. These environmental attributes include information about the MWh such as its fuel source and associated emissions data. In recent years, markets have developed for the sale of these environmental attributes separately from the underlying energy. These markets allow utilities subject to requirements regarding their portfolio mix (often referred to as RPS's) to meet those requirements by purchasing just the environmental attributes, rather than the underlying energy. New England has such a market for environmental attributes. To facilitate this market, NEPOOL developed a GIS that creates a certificate for each MWh of energy generated or imported into New England based on environmental information provided by generators, including fuel source and emissions data. These certificates can then be bought and sold.

The HQ PPA provides that HQUS will transfer environmental attributes associated with the energy delivered by HQUS into the New England markets in an amount matching the Vermont Buyers' energy quantities and reflecting the HQP system mix, which cannot be less than 90 percent hydroelectricity.<sup>36</sup> CLF asserts that this transfer of environmental attributes will not provide an environmental benefit because the environmental attributes to be delivered will not represent the attributes of HQP's actual incremental generation to serve the HQ PPA, and the accuracy and validity of the environmental attributes cannot be demonstrated.<sup>37</sup> CLF contends that the environmental attributes to be transferred to the Vermont Buyers should be based on

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36. See, finding 29, above.

37. CLF Brief at 2-4.

HQP's hourly incremental environmental attributes rather than that system's average attributes.<sup>38</sup> CLF also argues that, absent a demonstration of the environmental effect of the transfer, the proposed transfer of attributes could amount to "stealing credits" from another claimed use, a form of double-counting that is improper in environmental accounting. CLF further asserts that allowing a transfer of the attributes to the Vermont Buyers leads to possible "laundering" of attributes by Vermont and undermines the validity of markets to support renewable energy.<sup>39</sup>

Environmental attribute trading programs are based on the premise that there are environmental attributes associated with each MWh generated in a year, and these attributes can be traded separately from the underlying energy. The HQ PPA's treatment of environmental attributes is consistent with such a framework — HQUS will provide the Petitioners with environmental attributes in a quantity matching each Buyer's Energy Quantity and the environmental attributes could be traded separately from the underlying energy. In such an environment, the specific incremental generation used to satisfy the HQ PPA is irrelevant; what matters is that the environmental attributes are verifiable and separable from the underlying energy. Under the HQ PPA, HQUS will provide the Petitioners with system power, that is, power that is not linked to the production of any specific generating facility. In this circumstance, it is reasonable for the environmental attributes to be provided to the Petitioners to reflect HQP's system mix, rather than the specific marginal source of energy that will be used to satisfy the HQ PPA. In addition, given that standard industry practices focus on annual reporting periods, it is appropriate for the HQ PPA's reporting and verification protocols to be based on an annual analysis as well.

Furthermore, the HQ PPA requires HQUS to verify characteristics of the environmental attributes. Specifically, HQUS must verify that: (1) the HQP system mix consists of at least 90 percent hydroelectricity in each year; (2) the required amount of attributes originated from the HQP system mix and were delivered into New England, were transferred to the Vermont Buyers, were not transferred to any other person, were not claimed as part of energy sold elsewhere, and were not retired or used in any other program; and (3) HQUS owned the attributes prior to

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38. CLF Reply Brief at 6.

39. CLF Brief at 4.

transfer and transferred them to the Vermont Buyers free of any competing interests.<sup>40</sup> In addition, under the HQ PPA, the Petitioners have the right to audit the compliance of HQUS with the HQ PPA obligations to transfer environmental attributes.<sup>41</sup> The Petitioners assert that these provisions of the HQ PPA will enable them to demonstrate the accuracy and validity of the environmental attributes, and will prevent "double-counting" of the attributes by HQUS as a result of their transfer to the Petitioners.<sup>42</sup> The Board recognizes the importance of ensuring the accuracy of the environmental attributes as well as preventing double-counting of the attributes, and concludes that the HQ PPA's provisions should be adequate to address these issues.

CLF raises a further concern regarding the sale of the environmental attributes by the Petitioners subsequent to their transfer from HQUS. Specifically, CLF asserts that, because Vermont does not have an RPS, allowing such sales "gives the Petitioners a financial stake in undermining the purpose and effectiveness of RPS requirements of other jurisdictions (and of Vermont, should one be required in the future)" and that the result of such sales would be an increase in the carbon emissions associated with Vermont's electric supply compared to retiring the attributes.<sup>43</sup> CLF adds that:

Sales of the Environmental Attributes Product contemplated by the [HQ PPA] is not environmentally sound or consistent with Vermont's environmental and regulatory goals and standards even if allowed under the SPEED program. . . . The language defining sustainable energy resources in the SPEED statute is fundamentally flawed and undercuts the very environmental goals it was created to further.<sup>44</sup>

This proceeding is not the forum for CLF to raise concerns regarding Vermont statute; such concerns should be addressed to the Legislature. The Board is responsible for implementing the policies established by Vermont lawmakers and codified in statute. This includes the SPEED program, whose goals are based upon electricity generated by new

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40. See, finding 30, above.

41. See, finding 31, above.

42. Petitioners Brief at 22; Petitioners Reply Brief at 7.

43. CLF Brief at 8.

44. CLF Brief at 7.

renewable resources, not on ownership of the environmental attributes associated with those resources.<sup>45</sup>

The Department raises an additional issue related to the possible sale of the environmental attributes resulting from the HQ PPA by the Vermont Buyers. The Department notes that the Board is considering how best to address the issue of claims and representations regarding RECs and other environmental attributes in Docket 7533 (the Board's docket implementing the SPEED standard-offer program). The Department recommends that the Board impose the following condition in this proceeding, to meet the concerns identified by the Department in Docket 7533 regarding protecting consumers from misleading advertising and marketing claims regarding these products:

Petitioner agrees that it will not sell any renewable energy credits (RECs) or other environmental attributes obtained through the [HQ] PPA to more than one consumer, or make any claims regarding those disaggregated attributes in any marketing or advertising if it has sold those disaggregated attributes.<sup>46</sup>

The Petitioners assert that there is no need for the Board to impose such a claims-based condition in a CPG in this proceeding. They argue that the Department's concerns regarding protecting consumers from misleading advertising and marketing claims have broad implications and are more appropriately addressed in a comprehensive generic proceeding. The Petitioners argue that in Docket 7614, a case involving a petition for a CPG to operate a landfill-gas-to-energy facility, the Board declined to impose a condition recommended by the Department regarding double-counting of RECs or other attributes associated with the project and stated instead that the issue was better addressed in the more generic Docket 7533.<sup>47</sup> The Petitioners also contend that there are no claims-based conditions associated with the Board's approval of another purchase, including attributes, from a non-Vermont resource.<sup>48</sup> Finally, the Petitioners assert that the Department's proposed limitation on marketing may conflict with or duplicate

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45. For example, 30 V.S.A. § 8005(d)(2) states that "A State goal is to assure that 20 percent of total statewide electric retail sales before July 1, 2017 shall be generated by SPEED resources."

46. Department Brief at 24.

47. Petitioners Reply Brief at 12, citing *Petition of Brattleboro Carbon Harvest, LLC*, Docket No. 7614, Order issued 7/13/10, at 17.

48. Petitioners Reply Brief at 12, citing *Petition of Green Mountain Power Corp.*, Docket No. 7590, Order of 5/13/10.

provisions relating to "unfair or deceptive acts or practices in commerce" under Vermont's Consumer Fraud Act (9 V.S.A. §§ 2451-2480r), which is administered by the Vermont Attorney General.

30 V.S.A. § 209(f) provides the Board with jurisdiction to prescribe standards for truth in labeling of electricity. As noted by the Department,<sup>49</sup> the Vermont Attorney General's Office has supported the Board's authority to impose conditions governing claims regarding environmental attributes.<sup>50</sup> The Department's proposal is the first time a claims-based condition has been proposed in a proceeding involving a purchase that includes environmental attributes from a non-Vermont resource, thus it is the first time the Board must decide whether to impose such a condition in an individual proceeding or whether it should address the matter on a generic basis.

This case is distinct from Docket 7614; that case involved a SPEED standard-offer project while the instant proceeding does not. There are many SPEED standard-offer projects and, at the time of the Board's decision in Docket 7614, there was already a generic proceeding underway to address issues associated with implementing the standard-offer program (Docket 7533). Thus, it was appropriate to consider the issue on a generic basis in the broader proceeding. Even though the instant proceeding does not involve a standard-offer project, the Board has considered whether any conditions developed in Docket 7533 should be applied to the instant power purchase. However, the discussions in Docket 7533 relate to conditions on generators of electricity, while this proceeding is focused on the purchasers of electricity. Therefore, it is likely that any conditions developed in that proceeding would need to be modified at least slightly to apply to purchasers. For these reasons, the Board determines that it is appropriate to include a claims-based condition in the CPG issued today.

Turning to the specific condition recommended by the Department, we note that the Petitioners have not commented on the substance of the Department's proposed condition.<sup>51</sup> CLF argues that the condition recommended by the Department is insufficient. CLF agrees that precluding selling the same attributes to more than one customer and limiting claims about the

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49. Department Reply Brief at 5.

50. *See*, Letter of Elliott Burg, Assistant Attorney General, dated September 17, 2010, filed in Docket 7533.

51. Petitioners Reply Brief at 11-13.

attributes the Petitioners have sold are appropriate. However, CLF asserts that the Department's recommendation is inadequate and does little more than protect against criminal fraud. Instead, CLF recommends three different conditions related to the environmental attributes that, according to CLF, "are required to ensure that the attributes represent actual environmental benefit."<sup>52</sup>

The conditions recommended by CLF are:

1. The Petitioners are prohibited from claiming that the power provided under the HQ PPA is renewable, low carbon, or otherwise environmentally preferred. Any resale of the power purchased under the HQ PPA shall be subject to a contractual requirement that the purchaser submit to the same requirement and impose it on any subsequent purchasers.
2. The Petitioners shall present within 60 days of a Board order approving the HQ PPA, and annually thereafter, an analysis of the HQ PPA on the basis of HQ's incremental system mix. The analysis shall be conducted by an independent third party and determine, based on transparent accounting for the environmental attributes of power generated on, imported to and exported from the HQ system, that the attribute products to be transferred to the Petitioners are (1) accurate, (2) based on the HQ system's incremental hourly environmental attributes rather than that system's average attributes, and (3) not relied upon by HQ or any other party to meet any requirement, whether "aspirational" or legally binding.
3. Petitioners shall not count power provided under the HQ PPA towards SPEED goals or towards any RPS or environmental portfolio standard until the analysis provided for above has been approved by the Board.<sup>53</sup>

The Petitioners oppose the adoption of the conditions recommended by CLF.

As discussed above, the Board has determined that it is appropriate for: (1) the environmental attributes to be provided to the Petitioners to reflect HQP's system mix, rather than the specific marginal source of energy that will be used to satisfy the HQ PPA; and (2) the HQ PPA's reporting and verification protocols to be based on an annual analysis. Therefore, the Board declines to adopt CLF's second proposed condition which would require an analysis of HQP's incremental hourly system mix.

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52. CLF Reply Brief at 4-5.

53. CLF Brief at 15-16.

The Board also declines to adopt CLF's third proposed condition because this condition is premised on Board approval of an analysis we have determined is not necessary. Instead, power provided under the HQ PPA will count towards SPEED goals or an RPS, should one go into effect, if it meets the criteria set forth in Vermont law for such power.<sup>54</sup>

Both CLF's first proposed condition and the Department's proposed condition would restrict the Petitioners' ability to make certain claims regarding the nature of the power provided under the HQ PPA. However, CLF's proposed condition would prohibit the Petitioners from making these claims even if the Petitioners kept the environmental attributes, while the Department's proposed condition would restrict the Petitioners' claims regarding the nature of the power only if they sold the associated environmental attributes.

CLF argues that its proposed condition is necessary because the Petitioners have not shown that any specific portion of the energy to be provided under the HQ PPA is renewable as defined in Vermont law. According to CLF, this is because the Petitioners' claims are based on the delivery of the environmental attributes product and "sweeping generalities" about HQP's system, and Vermont law does not explicitly authorize imputing the sending system's average attributes to the imported system power. Therefore, according to CLF, the Petitioners have only shown that the power might be renewable.<sup>55</sup>

The Petitioners assert that Vermont law expressly recognizes that "renewable energy does not become 'unrenewable' merely because it is a 'portion of electricity produced by a system of generating resources.'"<sup>56</sup>

30 V.S.A. § 8002(2) defines "renewable energy" as "energy produced using a technology that relies on a resource that is being consumed at a harvest rate at or below its natural regeneration rate." Until July 1, 2012, Section 8002(2)(c) limits the energy produced by a

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54. For example, 30 V.S.A. § 8005(d)(3) provides:

For the purposes of the determination to be made under this subsection [related to percent of total statewide electric retail sales provided by SPEED resources], electricity produced at all facilities owned by or under long-term contract to Vermont retail electricity providers, whether it is generated inside or outside Vermont, that is new renewable energy shall be counted in the calculations under subdivisions (1) and (2) of this subsection.

"New renewable energy" is defined in 30 V.S.A. 8002(4).

55. CLF Brief at 6-7.

56. Petitioners Reply Brief at 9.

hydroelectric facility that is considered renewable to the energy produced by such facilities with a generating capacity of 200 MW or less. New legislation passed in 2010 removes this limitation, effective July 1, 2012, and provides that "The only portion of electricity produced by a system of generating resources that shall be considered renewable is that portion generated by a technology that qualifies as renewable under this subdivision (2)."

CLF's proposed first condition is premised on its concerns regarding the accuracy of the environmental attributes to be delivered under the HQ PPA. The Board has already determined that the HQ PPA includes provisions that should enable the Petitioners to demonstrate the accuracy and validity of the environmental attributes, and that should prevent "double-counting" of the attributes by HQUS as a result of their transfer to the Petitioners. In addition, the HQ PPA also includes express remedies should HQUS fail to satisfy its obligations regarding the environmental attributes' transfer and verification.<sup>57</sup> For these reasons, the Board does not find it necessary to restrict Petitioners' claims regarding the nature of the power delivered under the HQ PPA as long as the Petitioners retain the environmental attributes associated with that power. Therefore, the Board declines to adopt CLF's first proposed condition.

The Board does, however, find it appropriate to limit the Petitioners' ability to make claims and representations regarding the power provided pursuant to the HQ PPA if the Petitioners sell the attributes associated with that power. In addition, as supported by both CLF and the Department, it is appropriate to prevent the Petitioners from selling any renewable energy credits or other environmental attributes obtained through the HQ PPA to more than one consumer in order to avoid double-counting of those attributes. Therefore, the Board will include the Department's proposed condition in the CPG attached to this Order (with slight modifications to reflect the fact that the condition will apply to multiple Petitioners).

### **(3) Conclusion re General Good**

In order to issue a CPG, the Board must find that the HQ PPA will promote the general good of the State in accordance with Section 248(a)(1). For the reasons set forth in prior sections of this Order, the Board has concluded that the proposed purchases under the HQ PPA satisfy the

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57. See, finding 32, above.

applicable criteria of Section 248(b), i.e., the purchases are needed to meet the needs of Vermont electric consumers, will not adversely affect system stability and reliability, will provide an economic benefit, are consistent with applicable utility IRPs and the principles of least-cost planning, comply with the Vermont Electric Plan, and can be served economically by existing or planned transmission facilities.

These considerations, taken together, strongly support a conclusion that the proposed purchases under the HQ PPA will promote the general good of the State. However, the Section 248(a)(1) determination of general good may take into account factors in addition to those specified in the criteria of Section 248(b).<sup>58</sup> In the present proceeding, the only additional factors that any party has raised are the potential for the HQ PPA to result in the construction of new power generation facilities in Québec, and possible conditions related to the environmental attributes that HQUS will transfer to the Vermont utilities. As noted above, the Board has concluded that approval of the HQ PPA should not cause the construction of major new facilities on the HQP system, and that concerns about potential misuse or misrepresentation of the environmental attributes are addressed by the inclusion in the CPG of a slightly modified version of the Department's proposed condition.

Therefore, the Board concludes that, pursuant to 30 V.S.A. § 248(a)(1), the Vermont utilities' purchases under the HQ PPA will promote the general good of the State.

#### **D. CVPS-Vermont Marble Agreement**

##### **Findings**

180. The HQ PPA provides in Section 3.2(c) that, subject to the right of HQUS to require changes in CVPS's credit and collateral requirement to reflect the reallocation of an additional energy to CVPS, "Vermont Marble shall have the right to assign its allocation to CVPS in the event that the Vermont Public Service Board approves the sale of Vermont Marble assets to CVPS, and the assignment occurs on or before May 1, 2012." Allard pf. at 22; exh. Pet. Joint-3 at 16.

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<sup>58</sup>. See, e.g., *Application of Twenty-Four Electric Utilities*, Docket No. 5330, Order re Scope, Intervention, and Motion to Dismiss, 9/21/89.

181. Vermont Marble and CVPS have entered into an Assignment and Assumption Agreement, dated August 12, 2010, under which Vermont Marble and CVPS agree, in the event the Board approves the sale of Vermont Marble assets to CVPS, to take the necessary steps for the assignment by Vermont Marble, and the assumption by CVPS, of the rights and obligations of Vermont Marble under the HQ PPA and the Guaranty Agreement. Such rights and obligations include, but are not limited to, the assignment by Vermont Marble of its energy allocation under the HQ PPA to CVPS and the satisfaction by CVPS of the obligation to make changes in the credit and collateral requirements that may be required by HQUS under the HQ PPA ( provided, however, that the credit and collateral changes required by HQUS are acceptable to CVPS). Allard pf. at 22; exh. VMPD-2 at 1–2; *see*, finding 43, above.

182. Under this Assignment and Assumption Agreement, CVPS also "agrees to and shall be at risk and shall defend, indemnify, and save [Vermont Marble] harmless from any and all claims, obligations, duties, and undertakings that may arise under or as a result of the [HQ PPA], including all payments due or to become due for [Vermont Marble's allocation of energy] and all costs of and risks to CVPS of the need to satisfy [HQUS]'s requirements regarding CVPS's credit and collateral requirement including any inability or failure to satisfy such requirements." Exh. VMPD-2 at 1–2.

### Discussion

Vermont Marble and CVPS currently have a petition pending before the Board in Docket No. 7660 for the sale of Vermont Marble's electric assets to CVPS, which would involve the assumption by CVPS of Vermont Marble's obligation to provide electric service in Vermont Marble's existing service territory. In the event the Board approves this sale, Vermont Marble requests the approval of the Board to assign, and CVPS requests the approval of the Board to assume, Vermont Marble's rights, duties and obligations under the HQ PPA, and both Vermont Marble and CVPS seek the Board's approval of the Assignment and Assumption Agreement. In addition:

CVPS and Vermont Marble also request the general approval of the Board to change the Collateral Agreement between CVPS and HQUS and the credit and collateral requirements thereunder to reflect the reallocation to CVPS resulting

from such assignment and assumption and will request the specific approval of the Board once the change in collateral requirements is made known to CVPS.<sup>59</sup>

The proposed arrangements between Vermont Marble and CVPS as provided in their Assignment and Assumption Agreement seem appropriate under the circumstances. The Board has no objection to these arrangements, and finds that, in the event the proposed asset sale in Docket No. 7660 is approved by the Board and closed, the purchase by CVPS from HQUS of the energy allocation of Vermont Marble under the HQ PPA will promote the general good of the State. The Board also approves in concept the request to allow reasonable changes to the credit and collateral requirements under CVPS's Collateral Agreement with HQUS to reflect the reallocation of Vermont Marble's energy purchase to CVPS, it being understood that CVPS will request the specific approval of the Board once HQUS makes its request for such changes.

**E. Requests for 30 V.S.A. § 108 Consents by Stowe, Vermont Marble, VPPSA and WEC Findings**

183. Under each of their Collateral Agreements with HQUS, Stowe, Vermont Marble and VPPSA may have to provide collateral to HQUS as performance assurance in the form of a cash deposit or a letter of credit from a qualified institution. Petition at 16-17; Kieny (Stowe) pf at 20–21; Callnan pf at 22–23; exh Pet. Joint-4; *see*, finding 34 above.

184. Under the terms of its VPPSA PSA, WEC may be required to provide collateral to VPPSA for the purpose of providing security for the collateral obligations of VPPSA under its Collateral Agreement with HQUS. Richards pf. at 34; exh. VPPSA-2.

**Discussion**

Stowe, Vermont Marble, VPPSA and WEC have each requested the Board to consent to the provision of collateral in the form of cash or a letter of credit under the respective Collateral Agreements that VPPSA, Stowe and Vermont Marble have entered into with HQUS and, in the case of WEC, under the VPPSA PSA with WEC. Under 30 V.S.A. § 108(a), a corporation subject to the jurisdiction of the Board may not pledge its corporate property nor issue any

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59. Petition at 18.

evidence of indebtedness without a finding by the Board that such pledge or issuance will be consistent with the general good of the State.

In the case of Vermont Marble, it is anticipated that its parent company will provide a guaranty of Vermont Marble's payment obligations under the HQ PPA, which guaranty would not appear to require Board consent under Section 108. However, Vermont Marble is seeking consent in case, at some future time, Vermont Marble itself, instead of its parent company, is required to provide cash or a letter of credit as collateral.<sup>60</sup>

Stowe, Vermont Marble, VPPSA and WEC may be required to provide eligible collateral as a condition to the purchase of HQ PPA power by each of them.<sup>61</sup> Accordingly, and after reviewing the terms of the collateral requirements as they would apply to Stowe, Vermont Marble and VPPSA, as set forth in the form of Collateral Agreement filed as Exh. Pet. Joint-4, and WEC, as set forth in the form of VPPSA PSA filed as Exh. VPPSA-2 (including the provisions specific to WEC), the Board finds under 30 V.S.A. § 108 that the proposed provision of collateral by Stowe, Vermont Marble, VPPSA and WEC will be consistent with the general good. Although the Board will not require the renewal of these Section 108 consents after five years as it has done in other instances, the Board retains the authority to review and evaluate the collateral arrangements under the respective Collateral Agreements and WEC's VPPSA PSA as part of the Board's future consideration of any related financing or the renewal of any credit line under which the required letters of credit are issued.

## **F. Enduring Rate Recovery**

### **Findings**

185. The Collateral Agreements define "Enduring Rate Recovery" as "an order issued by the Vermont Public Service Board that, in all material respects, provides assurance that [the Vermont Buyer]'s ability to recover its costs associated with the [HQ] PPA shall not be disallowed, provided that there is a continuing obligation of [the Vermont Buyer] to prudently manage its rights and obligations under the [HQ] PPA." Exh. Pet. Joint-4 at 4.

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60. Allard pf at 20-21; Petitioners' Proposed Decision at 24.

61. See, findings 183 and 184, above; exhs. Pet. Joint-3 and 4.

186. If the Board grants Enduring Rate Recovery to the Vermont Buyers, certain of the Buyers expect to achieve modest cost savings related to the HQ PPA, while other Buyers do not anticipate any cost savings. Exh. DPS-2 (Conf.).

187. Enduring Rate Recovery may provide Vermont Buyers some additional financial capability to enter future power purchases. Exh. DPS-2 (Conf.).

### Discussion

The Petitioners have requested that the Board issue a ruling granting "Enduring Rate Recovery" of the HQ PPA transaction costs. "Enduring Rate Recovery" is defined in the Collateral Agreements as "an order issued by the Vermont Public Service Board that, in all material respects, provides assurance that [the Vermont Buyer]'s ability to recover its costs associated with the [HQ] PPA shall not be disallowed, provided that there is a continuing obligation of [the Vermont Buyer] to prudently manage its rights and obligations under the [HQ] PPA."

Rate recovery of a utility's costs is ordinarily addressed in rate proceedings, in which the Board would review the costs according to traditional ratemaking principles that are designed to ensure that the utility's ratepayers only pay such costs as are reasonably required to provide them service, including the principle that costs must be prudently incurred in order to be charged to ratepayers. Granting the Petitioners' request in this docket for Enduring Rate Recovery would require a departure from these long-established ratemaking practices.

Because granting a utility request for pre-approval of rate recovery requires waiving long-standing ratepayer protections, Board precedent has established the principle that guaranteed rate recovery is available only when it will result in the creation "of clear and compelling benefits to ratepayers that would not be attainable without such recovery guarantees."<sup>62</sup>

The Petitioners in the present Docket acknowledge that they must demonstrate "clear and compelling benefits to ratepayers" in order to obtain Enduring Rate Recovery. According to the

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62. *Re: Vermont Yankee Nuclear Power Corp.*, Docket No. 6545, Order 6/13/02 of at 95; *see also*, *Petition of CVPS re Lamoille River Hydroelectric Project*, Docket No. 6905, Order of 12/22/06, at 29; *Re: Investigation into Central Vermont Public Service Corporation's Integrated Resource Plan*, Docket 6854, Order of 3/9/04 at 16-17.

Petitioners, they have satisfied this requirement because they "have shown clear and compelling benefits relating to improved [HQ] PPA credit terms, the potential for lower electric rates due to improved creditworthiness and lower capital costs, and important policy benefits associated with the [HQ] PPA that will be advanced by the issuance of the requested determination."<sup>63</sup>

The Department disputes the sufficiency of the Petitioners' asserted benefits to support pre-approved rate recovery. The Department contends that the only benefits associated with Enduring Rate Recovery that the Petitioners have identified are improved credit terms under the Collateral Agreement and potentially improved credit ratings, and that this falls short of showing the "clear and compelling benefits to ratepayers" that are required to justify guaranteed rate recovery.

The Department correctly observes that granting the requested Enduring Rate Recovery would provide only limited benefits. First, under the Collateral Agreement, the Vermont Buyers will receive more favorable terms with Enduring Rate Recovery than without. The benefits of the more favorable collateral requirements are, however, modest in terms of cost savings, and speculative and uncertain with respect to the value of increased financial capacity for future power transactions. Second, a Board order guaranteeing rate recovery for the HQ PPA costs may, as the Petitioners suggest, lead to improved credit ratings and an associated reduction in capital costs. However, the Petitioners do not claim the improved credit ratings to be certain or even reasonably assured;<sup>64</sup> instead, they contend only that "Enduring rate recovery 'increases the *likelihood* of a higher credit rating . . . .'"<sup>65</sup>

The Petitioners also point to "important policy benefits associated with the [HQ] PPA that will be advanced by the issuance of the requested determination."<sup>66</sup> Those policy benefits as identified by the Petitioners include the HQ PPA's affordability, stable pricing, long-term nature, and low carbon emissions. These are benefits of the HQ PPA, not of the Enduring Rate

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63. Petitioners Reply Brief at 6.

64. Nor could they – as this Board has observed over the years, there is no assurance of improved credit ratings in the wake of favorable regulatory action.

65. Petitioners Reply Brief at 4 (quoting exh. DPS-2, Response to Discovery Request DPS 1-34)(emphasis added).

66. Petitioners Reply Brief at 6.

Recovery. While the Petitioners claim that granting guaranteed rate recovery for the HQ PPA costs will provide incentives to the Vermont utilities to enter such beneficial contracts, that ignores the fact that the utilities already bear the obligation to seek resources that provide such benefits. Among a Vermont electric utility's statutory obligations is the requirement to "prepare and implement a least cost integrated plan for the provision of energy services to its Vermont customers."<sup>67</sup> Under that statute, a least cost integrated plan:

is a plan for meeting the public's need for energy services, after safety concerns are addressed, at the lowest present value life cycle cost, including environmental and economic costs, through a strategy combining investments and expenditures on energy supply, transmission and distribution capacity, transmission and distribution efficiency, and comprehensive energy efficiency programs.<sup>68</sup>

The utilities are further required to obtain sufficient quantities of electricity from renewable generation to satisfied their obligations under Chapter 89 of Title 30. Vermont's electric utilities should not need the promise of guaranteed rate recovery to pursue resources that satisfy these legal obligations.

We commend the Petitioners for negotiating a power purchase agreement that promises significant benefits to Vermont ratepayers, as noted in the findings and discussion throughout this Order. However, the added benefits of guaranteed rate recovery are neither sufficiently substantial nor sufficiently certain to justify such a departure from long-established ratemaking principles. Therefore, we deny the Petitioners' request for Enduring Rate Recovery.

#### **G. Determination as to Applicability of 30 V.S.A. § 231 to HQUS**

In connection with the approval of the HQ PPA purchases, Petitioners have requested that the Board "find that the performance by HQUS under the PPA and related agreements does not

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67. 30 V.S.A. 218c(b).

68. 30 V.S.A. § 218c(a)(1).

require HQUS to obtain a CPG under 30 V.S.A. § 231."<sup>69</sup> Such a determination is a condition to the performance obligations of HQUS under the HQ PPA.<sup>70</sup>

Section 231 requires a CPG for the ownership or operation of "a business over which the Public Service Board has jurisdiction."<sup>71</sup> Under 30 V.S.A. 203(1), the Board has jurisdiction over a company engaged in the distribution or sale of electricity "directly to the public."<sup>72</sup> The HQ PPA does not involve a retail sale of electricity by HQUS directly to the public, but rather involves wholesale purchases by the Buyers and other Petitioners, who are all subject to the jurisdiction of the Board. A wholesale seller of electricity may be subject to the Board's jurisdiction under certain circumstances, for example, if the wholesale seller needs generation or transmission facilities in Vermont to fulfill its obligations under the wholesale contract. However, none of these circumstances are applicable to the performance by HQUS of its obligations under the HQ PPA.<sup>73</sup> As such, the Board finds that HQUS is not required to obtain a CPG under Section 231 to undertake the transactions contemplated by HQ PPA.

## **VI. CONCLUSION**

For the reasons set forth above, the proposed HQ PPA and associated transactions set forth in the Petition and the above findings will promote the general good of the State of Vermont in accordance with 30 V.S.A. § 248, and a certificate of public good to that effect shall be issued in this matter. In addition, the Petitioners' joint request for enduring rate recovery is denied.

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69. Petition at 17. *See*, finding 7, above, for a description of HQUS and its activities.

70. Section 2.1(a) of the HQ PPA provides in applicable part that the obligations of HQUS are contingent upon and subject to the receipt of:

(I) A determination by the Vermont Public Service Board that no Required Approvals of Seller are required to be obtained by Seller from the Vermont Public Service Board to undertake the transactions contemplated by this Agreement.

Exh. Pet. Joint-3 at 13.

71. 30 V.S.A. § 231(a).

72. 30 V.S.A. § 203(1).

73. Although the language of Section 203(1) related to wholesale sales comes from an earlier era and is not a model of clarity, it is the Board's view that the obligations of HQUS under the HQ PPA do not fall under this provision. And, to the extent that Section 203(1) could be construed to allow the Board to exercise jurisdiction over a company whose sole activity in Vermont was limited to the wholesale sale of power, such Board jurisdiction would be preempted by the Federal Power Act. 16 U.S.C. 824(b)(1).

## VII. ORDER

IT IS HEREBY ORDERED, ADJUDGED AND DECREED by the Public Service Board of the State of Vermont that:

1. The following items shall be added to the information that is subject to protection as confidential information under the December 14, 2010, Order issued in this proceeding:

- the unredacted version of page 13 of Department witness Lamont's prefiled testimony which includes information related to the formula for adjusting the HQ PPA price; and
- Exh. DPS-2 (Conf.), which constitutes the unredacted version of Petitioners' Responses to Interrogatories 25 through 35 of the Department's first set of discovery requests, and which include information related to the credit provisions of the HQ PPA.

2. Subject to the conditions set forth below, the proposed purchase of energy and environmental attributes by twenty Vermont electric utilities<sup>74</sup> ("Petitioners") as contemplated under the terms of the Purchased Power Agreement, dated August 12, 2010 (the "HQ PPA"), with H.Q. Energy Services (U.S.) Inc. ("HQUS"), and certain related agreements as detailed below, will promote the general good of the State under 30 V.S.A. § 248(a)(1), and a certificate of public good to that effect shall be issued.

3. Under this Order and the related certificate of public good, the purchases of energy (and the associated acquisitions of environmental attributes) by each of the Petitioners have been found to promote the general good of the State as follows:

(a) with respect to CVPS, its allocations of energy under the HQ PPA as set forth in the two tables in finding 26 above, up to an additional 25 MW of energy if additional allocations of

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74. These twenty Vermont electric utilities are: Barton Village, Inc. Electric Department ("Barton"); City of Burlington Electric Department ("BED"); Central Vermont Public Service Corporation ("CVPS"); Village of Enosburg Falls Water & Light Department, Inc. ("Enosburg"); Green Mountain Power Corporation ("GMP"); Town of Hardwick Electric Department ("Hardwick"); Village of Hyde Park Electric Department ("Hyde Park"); Village of Jacksonville Electric Company ("Jacksonville"); Village of Johnson Water & Light Department ("Johnson"); Village of Ludlow Electric Light Department ("Ludlow"); Village of Lyndonville Electric Department ("Lyndonville"); Village of Morrisville Water & Light Department ("Morrisville"); Village of Northfield Electric Department ("Northfield"); Village of Orleans Electric Department ("Orleans"); Town of Readsboro Electric Light Department ("Readsboro"); Town of Stowe Electric Department ("Stowe"); Swanton Village, Inc. Electric Department ("Swanton"); Vermont Electric Cooperative, Inc. ("VEC"); Vermont Public Power Supply Authority ("VPPSA"); Vermont Marble Power Division of OMYA, Inc. ("Vermont Marble"); and Washington Electric Cooperative, Inc. ("WEC").

energy become available under Section 2.3 of the HQ PPA, and the allocations of Vermont Marble if, subject to the Board's approval, CVPS completes the proposed acquisition of Vermont Marble's electric assets as proposed in Docket 7660 and as provided in the Assignment and Assumption Agreement between Vermont Marble and CVPS;

(b) with respect to GMP, its allocations of energy under the HQ PPA as set forth in the two tables in finding 26 above and up to an additional 10 MW of energy if additional allocations of energy become available under Section 2.3 of the HQ PPA;

(c) with respect to VEC, its allocations of energy under the HQ PPA as set forth in the two tables in finding 26 above, up to an additional 25 MW of energy if additional allocations of energy become available under Section 2.3 of the HQ PPA, and, as provided in a suballocation agreement between WEC and VEC in the form filed with the Board ("WEC-VEC Suballocation Agreement"), up to an additional 4 MW of the allocation WEC may be entitled to under the terms of a Power Sales Agreement ("VPPSA PSA") to be entered into between WEC and VPPSA;

(d) with respect to WEC, up to a maximum of 4 MW under its VPPSA PSA beginning on November 1, 2016, subject to the rights and obligations of VEC under the WEC-VEC Suballocation Agreement;

(e) with respect to BED, its allocations of energy under the HQ PPA as set forth in the two tables in finding 26 above:

(f) with respect to Stowe, its allocations of energy under the HQ PPA as set forth in the two tables in finding 26 above:

(g) with respect to each of Barton, Enosburg, Hardwick, Hyde Park, Jacksonville, Johnson, Ludlow, Lyndonville, Morrisville, Northfield, Orleans, Readsboro and Swanton (collectively, the "VPPSA Municipalities), up to the maximum amount of energy set forth in the table in finding 110, subject in the case of Swanton to the condition that it file with the Board within 60 days of the entry of this Order a suballocation agreement or other arrangement, satisfactory to the Board, that Swanton proposes to enter into with another Vermont distribution utility or utilities having a significant supply gap, that is similar in effect to the WEC-VEC Suballocation Agreement so as to mitigate Swanton's price exposure related to any excess power supply resources; and

(h) with respect to VPPSA, its allocations of energy under the HQ PPA as set forth in the two tables in finding 26 above and such additional amount of energy as it may be entitled to if allocations of energy become available under Section 2.3 of the HQ PPA, provided that the total amount of energy allocated to VPPSA shall not exceed the sum of the maximum allocations of the VPPSA Municipalities as set forth in the table in finding 110 and the maximum allocation of WEC.

4. Absent further Board approval, no Petitioner may purchase an amount of HQ PPA energy (and the associated acquisition of environmental attributes) that exceeds its allocation as set forth in Paragraph 3, above.

5. The terms of the Collateral Agreements, dated August 12, 2010, that each of Stowe, Vermont Marble and VPPSA has entered into with HQUS (in the form filed with the Board) are consistent with the general good of the State, and the Board consents under 30 V.S.A. § 108 to the securing of letters of credit or the pledges of cash by Stowe, Vermont Marble and VPPSA as is required under each of their Collateral Agreements.

6. The collateral terms applicable to WEC under the VPPSA PSA with WEC (in the form filed with the Board) are consistent with the general good of the State, and the Board consents under 30 V.S.A. § 108 to the provision of collateral by WEC as required under its VPPSA PSA.

7. The performance by HQUS of its obligations under the HQ PPA and related agreements (in the form filed with the Board) will not require HQUS to obtain a certificate of public good under 30 V.S.A. § 231.

8. The Petitioners' request for Enduring Rate Recovery rate treatment of their costs associated with the power purchases under the HQ PPA and associated transactions is denied.

9. No Petitioner shall sell any renewable energy credits ("RECs") or other environmental attributes obtained as a result of the purchase of energy from HQUS to more than one consumer, or make any claims regarding those disaggregated attributes in any marketing or advertising if it has sold those disaggregated attributes.

Dated at Montpelier, Vermont, this 15<sup>th</sup> day of April, 2011.

<u>s/ James Volz</u>	)	
	)	PUBLIC SERVICE
	)	
<u>s/ David C. Coen</u>	)	BOARD
	)	
	)	OF VERMONT
<u>s/ John D. Burke</u>	)	

OFFICE OF THE CLERK

FILED: April 15, 2011

ATTEST: s/ Judith C. Whitney  
Deputy Clerk of the Board

*NOTICE TO READERS: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Board (by e-mail, telephone, or in writing) of any apparent errors, in order that any necessary corrections may be made. (E-mail address: psb.clerk@state.vt.us)*

*Appeal of this decision to the Supreme Court of Vermont must be filed with the Clerk of the Board within thirty days. Appeal will not stay the effect of this Order, absent further Order by this Board or appropriate action by the Supreme Court of Vermont. Motions for reconsideration or stay, if any, must be filed with the Clerk of the Board within ten days of the date of this decision and order.*

**Appendix A — Appearances**

Sarah D. Hofmann, Esq.  
John Beling, Esq.  
for the Vermont Department of Public Service

Judith Dillon, Esq.\*  
for the Vermont Agency of Natural Resources

Dale A. Rocheleau, Esq.  
Paul A. Smith, Esq.\*  
for Central Vermont Public Service Corporation

Kimberly K. Hayden, Esq.  
Downs Rachlin Martin PLLC  
for Central Vermont Public Service Corporation

Donald J. Rendall, Jr., Esq.  
for Green Mountain Power Corporation

Peter H. Zamore, Esq.  
Charlotte B. Ancel, Esq.  
Sheehey Furlong & Behm, P.C.  
for Green Mountain Power Corporation

William F. Ellis, Esq.  
McNeil, Leddy & Sheahan, P.C.  
for City of Burlington Electric Department

Elijah D. Emerson, Esq.  
Primmer Piper Eggleston & Cramer, PC  
for Vermont Public Power Supply Authority

Victoria J. Brown, Esq.  
for Vermont Electric Cooperative, Inc.

Joslyn L. Wilschek, Esq.  
Primmer Piper Eggleston & Cramer PC  
for Vermont Electric Cooperative, Inc.

Edward B. French, Jr., Esq.  
Stackpole & French Law Offices  
for Town of Stowe Electric Department

Edward V. Schwiebert, Esq.  
Hans G. Huessy, Esq.  
Kenlan, Schwiebert, Facey & Goss, P.C.  
for Vermont Marble Power Division of OMYA, Inc.

Joshua R. Diamond, Esq.  
Diamond & Robinson, P.C.  
for Washington Electric Cooperative, Inc.

Brian P. Monaghan, Esq.  
Walsh & Monaghan, LLP  
for Thirteen Municipal Electric Utilities<sup>75</sup>

Sandra E. Levine, Esq.  
for the Conservation Law Foundation

William J. McCarthy, Jr., Esq.  
Leonard H. Singer, Esq.  
Couch White, LLP  
for International Business Machines Corporation

William A. Fead, Esq.  
Fead Construction Law PLC  
for International Business Machines Corporation

\* Appeared at hearing, but did not file notice of appearance

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75. Barton Villae, Inc. Electric Department; Village of Enosburg Falls Water & Light Department, Inc.; Town of Hardwick Electric Department; Village of Hyde Park Electric Department; Village of Jacksonville Electric Company; Village of Johnson Water & Light Department; Village of Ludlow Electric Light Department; Village of Lyndonville Electric Department; Village of Morrisville Water & Light Department; Village of Northfield Electric Department; Village of Orleans Electric Department; Town of Readsboro Electric Light Department; and Swanton Village, Inc. Electric Department.